

TRIENNIAL REPORT
ON
VACCINATION IN BURMA

FOR THE YEARS 1902-03 TO 1904-05.

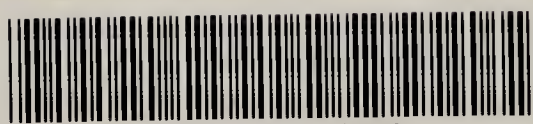


RANGOON:

OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA.

1905.

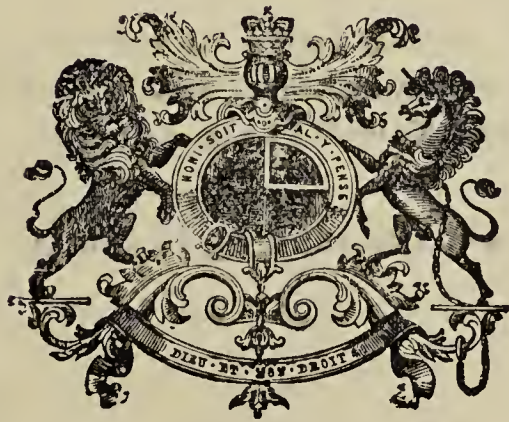
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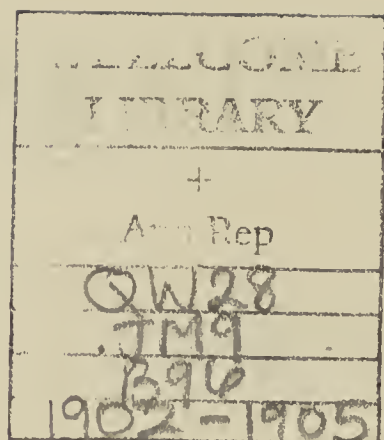
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TABLE OF CONTENTS.

RESOLUTION ON THE TRIENNIAL REPORT ON VACCINATION IN BURMA FOR THE YEARS 1902-03 TO 1904-05.

| | <i>Para.</i> | <i>Page.</i> |
|--|--------------|--------------|
| Late receipt of report | 1 | 1 |
| Average number of vaccinators employed and operations performed | 2 | <i>ib.</i> |
| Remarks <i>re</i> the untrustworthiness of the returns for past years | 3 | <i>ib.</i> |
| Inoculation | 4 | 2 |
| Vaccine dépôt | 5 | <i>ib.</i> |
| Expediency of limiting the performance of vaccination to certain seasons of the year ... | 6 | <i>ib.</i> |
| Subdivisional and Township Officer to explain the uses and advantages of vaccination and the dangers of inoculation | 7 | <i>ib.</i> |
| Lieutenant-Governor's commendation | 8 | 3 |

TRIENNIAL REPORT ON VACCINATION IN BURMA FOR THE YEARS 1902-03 TO 1904-05.

| | <i>Para.</i> | <i>Page</i> |
|---|--------------|-------------|
| Establishment | 1 | 1 |
| General results during the triennium | 2 | <i>ib.</i> |
| Average work of each vaccinator | 3 | <i>ib.</i> |
| Ages of those successfully vaccinated | 4 | 2 |
| Protection afforded to infants during the triennium | 5 | <i>ib.</i> |
| Protection to population | 6 | <i>ib.</i> |
| Inoculation | 7 | <i>ib.</i> |
| Results by districts | 8 | 3 |
| Lymph supply | 9 | <i>ib.</i> |
| Average cost of successful cases | 10 | 4 |
| Percentage of the total cost borne by Government and other funds | 11 | 5 |
| Outturn of work in Municipal towns | 12 | <i>ib.</i> |
| Protection afforded to infants in Municipal towns | 13 | <i>ib.</i> |
| Dispensary vaccination | 14 | <i>ib.</i> |
| Primary vaccination during past ten years | 15 | 6 |
| Inspections | 16 | <i>ib.</i> |
| General remarks | 17 | <i>ib.</i> |

RESOLUTION
ON THE
TRIENNIAL REPORT ON VACCINATION
IN
BURMA

For the years 1902-03 to 1904-05.

Extract from the Proceedings of the Government of Burma in the General Department, No. 1Z.-15, dated the 13th July 1905.

READ—

The Triennial Report on Vaccination in Burma for the years 1902-03 to 1904-05.

RESOLUTION.—The Report was due in the Secretariat on the 31st May, and was received in an incomplete state on the 16th June. The Lieutenant-Governor trusts that steps will be taken to ensure its more punctual submission in future years.

2. The average number of vaccinators employed in the Province increased from 213 in 1902-03 to 224 in 1903-04 and 233 in 1904-05, and the number of operations performed by them increased from 370,510 in 1902-03 to 398,634 in 1903-04, but fell to 397,441 in 1904-05. The average number of operations performed by each operator was 1,739, 1,779 and 1,706 in the three years respectively. The total number of persons vaccinated fell from 1,254,324 in the previous three years to 1,166,585 in the period under review, and the average number of operations performed annually by each vaccinator decreased from 2,200 to 1,742. It is fair to remark that the comparative result obtained is more favourable if the average number of persons vaccinated in each of the three years dealt with in this Report is compared with the number of operations performed in 1901-02, *i.e.*, the final year of the previous triennium, instead of with the average figures of that triennial period. In 1901-02 the number of operations performed was 352,976 as compared with an average of 388,862 in the three years now under review, but even on this basis of comparison the figures are not satisfactory, for the increase in the number of persons vaccinated is not proportionate to the increase in the number of operators, and the average number of operations performed by each vaccinator has steadily declined from 1,829 in 1901-02 to 1,706 in 1904-05. The total number of primary operations in the three years from 1902-03 to 1904-05 was less by 77,125 than the number in the previous triennium, while the percentage of success was 86·35 as compared with 92·47. Re-vaccinations also were less numerous, and the rate of success fell from 54·23 to 49·80.

3. On the whole, though there has been a large decrease in the mortality from small-pox in Lower Burma, it cannot but be confessed that the results as shown in the figures quoted are disappointing, though the admitted untrustworthiness of the figures in past years owing to the systematic falsifying of returns renders it impossible to accept these statistics as in themselves sufficient evidence of diminished efficiency. Such a result is indeed inherently improbable, for increased attention has undoubtedly been paid to vaccination throughout the Province in recent years as is witnessed by the satisfactory increase in the number of inspections which is shown in paragraph 16 of the Report. The fact that certain of the

results claimed are now reported to be more in accordance with general experience is perhaps a sign that the returns are beginning to represent the reality with some degree of accuracy. Thoroughly satisfactory and trustworthy returns can only be obtained by means of the employment of skilled and trustworthy operators and by careful supervision and constant inspection by an efficient agency. This result, it is hoped, may be attained as a result of the complete reorganization scheme for Native Superintendents and Vaccinators which has recently been submitted for the approval of the Government of India. His Honour observes that the average amount of work performed by each vaccinator during the three years under review has fallen considerably short of the 2,000 primary operations which were stated by Colonel Little in the Report for the years 1899-00 to 1901-02 to represent a fair year's work for a single operator. It is possible that Colonel Little's estimate was too high, but the point is one which should receive attention.

4. The Lieutenant-Governor concurs generally in the remarks contained in the Report on the subject of inoculation. Before inoculation can be prohibited it is necessary that vaccination throughout the Province should be improved. Sir Herbert White believes that the opinion expressed by Colonel Macrae is correct, and that there is little or no feeling of active resistance towards vaccination in Burma. He believes that if vaccination is properly performed with good lymph, so that the operation is generally successful, the mass of the people have no objection to it. Successful vaccination will bring about its own appreciation and the inoculator will then be in less demand. In Rangoon, where the attitude of the people is said to be hostile, the population is mainly Indian and the conditions are different from those prevailing in the remainder of the Province. The Superintendent-General of Vaccination is requested to consider whether the alleged hostility of the people of Rangoon towards vaccination may not be due to defects in the system which it may be possible to remedy.

5. The results of the working of the vaccine dépôt at Meiktila have so far proved somewhat disappointing, but His Honour is glad to learn that the present Superintendent, Major Entrican, takes special interest in the working of the dépôt and that there has been an improvement. He trusts that the efforts to make the dépôt a thoroughly efficient source of supply of lymph will not be relaxed and that they will be successful.

6. The Lieutenant-Governor has read with interest the remarks in paragraph 9 of the Report as to the possible expediency of limiting the performance of vaccination to certain seasons of the year. His Honour is aware that Colonel Macrae, who has only recently taken charge, has this question under consideration. It is hardly necessary to say that a comparatively small number of operations successfully performed and ensuring immunity is likely to do more to secure the popularity of vaccination than a large number performed ignorantly and inefficiently. The performance of vaccination under adverse climatic conditions seems to be undesirable and to be likely to bring vaccination into discredit. The Lieutenant-Governor will cordially support any proposals for reform in this respect or in other matters in which experience shews improvement to be attainable. His Honour is sanguine of the results of the improvement of the *personnel* of the operating and supervising staff if the work is performed on sound and scientific lines.

7. Although the attention of Subordinate Magistrates and Executive Officers was again, in the year 1903, called to the importance of the exercise of their personal influence and authority in support of vaccination, His Honour is not satisfied that sufficient regard is paid to these orders. He desires Commissioners and Deputy Commissioners to impress on Subdivisional and Township Officers that it is their duty, in the course of their tours, to take every opportunity of explaining to the people the uses and advantages of vaccination and the dangers of inoculation. These officers are constantly among the people; and if they are themselves in sympathy with the vaccination system, the extent to which they can promote its acceptance by the people is incalculable. His Honour commends this matter to the earnest attention of all officers concerned.

8. His Honour desires to record that Colonel Little, I.M.S., who was in charge of the Department during the period under review, devoted continuous attention to measures intended for its improvement, and that the scheme now under the consideration of the Government of India is based on his proposals. The Lieutenant-Governor thinks that thanks are due to Colonel Little for the interest taken by him in the improvement of the Vaccination Department.

By order of the Lieutenant-Governor of Burma,

W. F. RICE,

Offg. Secy. to the Govt. of Burma.

TRIENNIAL REPORT

ON

VACCINATION IN BURMA

FOR THE YEARS 1902-03 to 1904-05.

1. The establishment employed during the triennium as in the marginal Statement I.

| Year. | District Super-intendents. | Native Super-intendents. | Vaccinators. |
|-------------|----------------------------|--------------------------|--------------|
| 1901-02 ... | 38 | 14 | 194 |
| 1902-03 ... | 38 | 15 | 213 |
| 1903-04 ... | 39 | 15 | 221 |
| 1904-05 ... | 40 | 16 | 233 |
| Average ... | 39 | 15 | 223 |

statement shows that the vaccination staff increased by two District Superintendents, two Native Superintendents and 39 vaccinators. In 1902-03 there was an increase of 19 vaccinators, 1903-04 of 11 vaccinators, 1904-05 of 9 vaccinators.

A re-organization scheme for the appointment of Native Superintendents of Vaccination for the following districts—Akyab, Hanthawaddy, Pegu, Tharrawaddy, Prome, Bassein, Myaungmya, Ma-ubin, Pyapôn, Henzada, Toungoo, Thatôn, Amherst, Tavoy, Thayetmyo, Mandalay, Shwebo, Lower Chindwin, Pakôkku, Minbu, Magwe, Meiktila, Yamèthin and Myingyan, in three grades on Rs. 50, Rs. 75 and Rs. 100 a month, five years' service being required in each grade, with fixed travelling allowance of Rs. 25 for Native Superintendents of Vaccination and Rs. 15 for vaccinators per month has been approved of by the Local Government and forwarded to the Government of India for sanction. Another scheme for improving the class of men employed as vaccinators by requiring candidates to produce a certificate of having passed the VI or VII standard in Vernacular education was also proposed to the Local Government. The candidates are to be under training for six months on a stipend of Rs. 10 per month before being appointed to the grade of vaccinators.

2. *General results during the triennium.*—The total number of persons vaccinated during the three years was 1,166,585 as compared with 1,254,324 for the previous three years, a decrease of 87,739. This may be accounted for by a general improvement in correctness of returns. In former years it was found that the majority of vaccinators submitted false returns. The decrease is also attributed to a smaller number of children over three years of age and adults being available for operation.

Primary Vaccination.—The total number of primary operations was 1,094,975, a decrease of 77,125 compared with the previous triennial period; the percentage of success was 86·35 compared with 92·47. It is unsatisfactory to find such a marked decrease in percentage of success. This will be referred to later.

Re-vaccination.—The number of cases of re-vaccination fell from 82,224 to 71,610 as compared with the previous three years, and the rate of success fell from 54·23 to 49·80, which is nearer the correct figures than any previously returned. For really successful and modified operations Colonel Little considered 25 per cent. to be the limit of success in re-vaccination and 25 per cent. for modified success. This is much in accordance with general experience.

The proportion per 1,000 of people vaccinated during the period was 30·38 compared with 43·36 for the preceding period.

This shows that as the number of persons vaccinated increases, so will this proportion show a steady yearly decrease.

3. *Average work of each vaccinator.*—The average number of operations performed by each vaccinator was 1,742. In former years Civil Surgeons apparently blamed or fined vaccinators who did not show 400 or 500 cases per month with a high percentage of success. As a result, when they could not

legitimately obtain this high number, they resorted to falsifying their registers, and also falsifying the results of their work.

Latterly Civil Surgeons have been ordered to impress on the men that what is required is a true account of the work done, and that during the cold and hot weather, when it is possible for them to travel through the district, a larger number could be secured than in the rainy weather, when the Burman objects to his children being vaccinated and it is very difficult for the men to travel about.

Vaccinators are also supposed, after visiting a certain number of villages and vaccinating as many children as are obtainable, to return to the first village about 10 days or a fortnight later, verify their results, and attend to any children whose arms have become sore and ulcerated.

In order to get the best work out of vaccinators they must be closely watched and frequently inspected. For this reason a larger number and better class of Native Superintendents are required. In many districts Civil Surgeons cannot possibly find time to visit even half or one-third of the villages in their districts during the year. As a result the vaccinator's word must be taken for what he has done, and as there is practically little chance of his being found out, when he is unable to obtain a sufficient number of cases to operate on, he simply adds fictitious names to make up the number required.

During the past season several vaccinators were reported for bad work and submitting false returns. Some were dismissed and others received various punishments.

Statement I.

4. *Age*.—Of those primarily vaccinated 231,372 were children under one year of age, 517,049 one and under six, and 176,849 over six years of age.

The large number vaccinated during the period 'one and under six' is noticeable. The Burman prefers this age for the operation and only very reluctantly allows children under one year of age to be vaccinated.

Out of every 100 persons successfully vaccinated 25·01 were infants, 55·88 children between one and six years and 19·11 of all other ages.

5. In the previous triennium in Lower Burma the percentage of available infants protected was

| Year. | Registered births during the calendar years. | Registered deaths under one year during calendar years. | Number of children available for vaccination. | Infants successfully vaccinated during the year ending 31st March. | Percentage of available infants protected. |
|-------|--|---|---|--|--|
| 1902 | 167,496 | 32,501 | 134,995 | 38,562 | 28·57 |
| 1903 | 176,547 | 34,304 | 142,243 | 40,659 | 28·58 |
| 1904 | 173,021 | 32,707 | 140,314 | 35,460 | 25·27 |

returned as 58·59 for 1899, 43·61 for 1900 and 27·62 for 1901, which shows a rapid decrease in the years 1900 and 1901. The marginal statement shows that since then the percentages have been fairly stationary. The figures for the triennium under

review represent more truly the correct percentage of available infants vaccinated.

Appendices
and C.

A 6. *Protection to population*.—As can be seen by the statement the proportion protected by vaccination per 10,000 was 436·91 and the mortality from small-pox 5·57 during the period 1899-00 to 1903-04. The mortality from small-pox during the period 1899-00 was 13·21. Since that year there has been an almost continuous decrease, and the mean for the last five years 1900-01 to 1904-05 has fallen to 3·62 per 10,000.

7. *Inoculation*.—There is no doubt that a large number of sporadic outbreaks of small-pox in the districts are caused by inoculation which the Burman still prefers, though he knows its dangers. The reason for this preference is that a child who has been inoculated and recovers is thenceforth practically free from the danger of contracting small-pox, whereas his experience of vaccination is that children who have been subjected to the operation sometimes contract the disease. This is what bad and inefficient work on the part of careless and unskilful vaccinators leads to, and helps in a great measure to postpone the appreciation of vaccination which more successful work would in course of time fulfil.

The Burman *saya* charges one or two rupees per case inoculated and for this he carefully attends the child throughout the illness.

As there is no law prohibiting this practice of inoculation, and as the people still seem to prefer it to vaccination, Civil Surgeons and District Officers complain that it is not possible to suppress it.

The Civil Surgeon, Pegu, states that inoculation is carried on in all parts of the district, especially on the borders of Toungoo and Hanthawaddy. The Civil Surgeon, Ma-ubin, says that inoculators have been busy during the last quarter of the year.

8. *Results by districts.*—Four districts show yearly decreases in the number vaccinated during the triennium, *viz.*, Pegu (2,575), Prome (2,471), Ruby Mines (827) and Minbu (2,805). No explanations have been given. Statement I.

Marked decreases have taken place in the following districts comparing the period 1904-05 and 1903-04:—

| | | | | | | |
|-----------|-----|-----|-----|-----|-----|-------|
| Myaungmya | ... | ... | ... | ... | ... | 5,566 |
| Ma-ubin | ... | ... | ... | ... | ... | 3,715 |
| Henzada | ... | ... | ... | ... | ... | 3,429 |
| Kyaukpyu | ... | ... | ... | ... | ... | 2,379 |

The marked decrease in the Myaungmya district is due, it is stated, to the number of inoculators at work, the people preferring inoculation to vaccination.

In the Ma-ubin district the deficiency is attributed to the lazy and inferior class of vaccinators, and to more effective and closer inspections preventing falsification of returns.

In Kyaukpyu there was a decrease of 2,379 cases during 1904-05 compared with 1903-04 and 732 compared with 1902-03. The falling off is due to more careful supervision and check and changes in the staff brought about by the dismissal of two vaccinators and delay caused in getting suitably qualified men to fill their places.

A large number of districts show small decreases in 1904-05 as compared with the two previous years, due to bad lymph supplied by the Meiktila Dépôt in April, May and June. For a part of June this lymph failed altogether, and in many districts vaccination was entirely suspended. Some districts kept work going by obtaining lymph from Bangalore temporarily, but this Dépôt was only able to supply a very small portion of the demand.

The Civil Surgeon, Pegu, states that the falling off in towns is due to constant work having been carried on, thereby rendering the number requiring protection less; and in the district to bad workers and failure of lymph-supply from Meiktila during the second quarter of the year 1904-05, when vaccination had to be suspended entirely.

Six districts show a steady increase in work, *viz.*, Tharrawaddy, Amherst, Mergui, Sagaing, Lower Chindwin and Rangoon.

Bassein district shows an increase of 422 cases during the period 1904-05 and a percentage of success of 89.08.

In Hanthawaddy the total number of persons vaccinated during 1904-05 is larger than in the previous two periods, but the total number for the triennial period is less than the last triennial period by 19,134 cases.

In Tharrawaddy the total vaccination exhibits a progressive increase, being 14,892 for 1904-05 against 14,541 for 1903-04 and 11,816 for 1902-03. The increase in the past year was due to a scare caused by an epidemic of small-pox, which induced people to come willingly for vaccination. The ratio per cent. of success has also improved, being 85.63, 80.57 and 70.53 for the corresponding years.

The Akyab district shows a progressive increase in number vaccinated but a decrease in the ratio of successes.

Ten districts show a percentage of successes of 90 and over, seventeen districts 80 to 89, seven between 70 and 80, five between 60 and 70 and one (Salween) only 53.21.

9. *Lymph-supply.*—During the triennium, the lymph-supply was obtained for the whole province from the Central Dépôt, Meiktila, which was opened in February 1902.

During the period 1902-03, 386 calves were inoculated with 342 successes, during 1903-04, 557 with 456 successes, and during 1904-05, 252, of which 183 yielded lymph fit for issue.

The percentage of success of primary cases for the periods was 87·14, 87·20 and 84·71. The percentage of success shows a decline. This is very unsatisfactory and the rates compare very unfavourably with those obtained in India. Numerous reasons are given for the poor results, which are ascribed to bad lymph, bad work, carelessness and sometimes wilfulness on the part of mothers, who rub off the lymph, etc. It is possible that in this Province, where communications are bad and distances great, the lymph deteriorates in transit; there is no doubt much unskilful work in addition.

Vaccination is supposed to be carried on during the whole year in this Province. In Indian provinces it is only during half the year, from October to the end of March.

In the hot weather and rains much of the unsuccessful work results.

I think it might perhaps be desirable to limit the performance of vaccination in the hot and rainy months to the suppression of outbreaks of small-pox and to places within easy communication from the Dépôt. Unsuccessful work and consequent re-vaccination prejudices the people against the operation. I will make enquiries as to the advisability of limiting the work as above suggested. I am informed that during epidemics people accept vaccination freely, and the successful stamping out of outbreaks creates most useful object-lessons and will largely help to popularize it.

During the three years the lymph has deteriorated markedly during the months of April, May and June, owing it is supposed to the vaccine organism being affected by the high atmospheric temperature. This was especially so last year when, during April and the first part of May, the lymph was very poor in quality; at the end of May all inoculations on calves failed and supplies could not be sent out. Bangalore, Shillong and Rangoon lymph were tried without success. Finally a child was brought from Mandalay, where arm-to-arm vaccination had been carried on. From this child's arm a calf was successfully inoculated and a new strain of lymph started.

Lymph was again issued to the Province in the end of June with a general improvement in recorded results. The reason for this temporary failure of lymph supply is attributed to high temperature, calves obtainable being poor and weakly and weakening of the lymph strain by continual inoculation from calf to calf, which appears after some time to diminish the potency of the lymph.

Re-vaccination from a child, however, restores its original strength.

The outturn of lymph for the period was lanolinated lymph for 472,489 cases, glycerinated for 14,340 cases.

The average cost of each case was 1·92 pies.

No conclusion has yet been arrived at as to the best form in which to issue lymph.

Glycerinated lymph in capillary tubes has been tried with favourable results; it is less liable to contamination, but its longevity is only 10 or 14 days, while lanolinated lymph keeps and is reliable up to three weeks or a month.

Numerous experiments have been made by the Superintendent throughout the year and it is hoped that a conclusion will soon be arrived at as to the most suitable medium for this province.

Credit is due to Major Entrican for good work performed at the dépôt.

Statement II.

10. *Cost during the triennium under review.*—The total cost of vaccination

| Year. | Establishment. | Travelling allowance. | Contingencies. | Total. | Average cost per case. |
|---------|----------------|-----------------------|----------------|----------|------------------------|
| | Rs. | Rs. | Rs. | Rs. | Rs. A. P. |
| 1902-03 | 61,279 | 15,857 | 8,693 | 85,829 | 0 4 5 |
| 1903-04 | 63,965 | 21,671 | 8,695 | 94,331 | 0 4 7 |
| 1904-05 | 71,332 | 21,234 | 7,583 | 1,00,150 | 0 5 2 |

in the province was Rs. 2,80,310 as compared with Rs. 2,31,674 for the previous triennium, the increased expenditure was caused by increase of pay to vaccinators, increase in the number of vaccinators, increase in the number of Native Superintendents of Vaccination, and extra charges incurred in connection with the opening and establishing of the Meiktila Vaccine Dépôt.

The cost of each successful case vaccinated as shewn in the marginal table was (annas 5-2 pies).

The increase in cost during 1904-05 is said to have been due to the failure of Meiktila lymph supply during the 2nd quarter, as mentioned in the previous paragraph.

The average cost during 1902-03 varied from Re. 1-0-11 in Thongwa, Re. 0-14-5 in Salween, Re. 0-14-4 in Thaton to Re. 0-1-5 in Shwebo and Re. 0-1-6 in Lower Chindwin.

During 1903-04 from Re. 1-1-7 in Hanthawaddy, Re. 0-14-4 in Thaton, Re. 0-11-1 in Rangoon to Re. 0-2-1 in Henzada, and Re. 0-2-2 in Tavoy.

During 1904-05 from Re. 1-0-8 in Hanthawaddy, Re. 0-15-1 in Thaton, Re. 0-12-8 in Northern Shan States, Re. 0-12-4 in Rangoon to Re. 0-2-2 in Shwebo, Re. 0-2-9 in Tavoy, Re. 0-2-5 in Henzada and Re. 0-2-8 in Lower Chindwin.

| Year. | Government | Municipality. | Local fund. | Native State. |
|-----------|------------|---------------|-------------|---------------|
| 1899-1902 | 23.46 | 24.67 | 51.35 | 0.52 |
| 1902-1905 | 34.17 | 17.96 | 44.69 | 3.18 |

11. *Percentage of cost.*—Comparing Statement II. the average cost borne by Government, Municipal, Local Funds and Native States for the triennium under review with the previous triennium, as shown in the margin, it will be seen that there has been a marked increase at Government ex-

pense, a considerable decrease of Municipal expense, a marked decrease of Local Funds expense, and an increase of expense borne by Native States.

12. *Municipal Towns.*—In the triennium under review six towns showed a continuous increase in the total outturn of work in each year as compared with two towns in the previous corresponding period. Eleven towns as compared with 16 in the previous triennium showed a steady decrease in each year. When compared with the previous year's figures only 18 of the 39 towns show an increase in work during 1904-05. In some towns where vaccination is compulsory no difficulty is experienced in obtaining subjects for operation. In Rangoon, however, although the outturn of work has increased, the attitude of the people is said to be hostile, 1,706 prosecutions were instituted during the year.

13. *Protection afforded to infants in Municipal Towns.*—By deducting the Appendix B. number of deaths of infants under one year of age from the number of births an approximate idea of the children available for vaccination can be obtained. From the statement it can be seen that an approximate number has been vaccinated in most of the towns.

In Mandalay town the total number of births for the year 1904-05 was 5,610, the number of deaths under one year of age 1,750, which leaves 3,860 available for vaccination; 4,560 children under one year of age were vaccinated. The discrepancy is explained by immigration from outside Municipal limits, and to the fact that a small proportion of the children who died under one year of age may have been vaccinated.

Bassein shows 1,030 births, 265 deaths under one year, 765 available, 758 vaccinated.

14. *Dispensary vaccination.*—It will be noticed from the statement that Statement III. there has been a yearly increase under this heading during the triennium, viz:

| | | | | | |
|---------|-----|-----|-----|-----|---------------|
| 1902-03 | ... | ... | ... | ... | 11,263 cases. |
| 1903-04 | ... | ... | ... | ... | 13,930 " |
| 1904-05 | ... | ... | ... | ... | 15,562 " |

this increase is both for primary and for revaccination.

In larger towns where the services of a whole-time vaccinator are employed who has vaccination stations at suitable places, and who also makes house to house visitations very few children are vaccinated at the dispensaries. It is in smaller towns without a whole-time vaccinator that dispensary vaccination is carried out, and the attention of Civil Surgeons has been directed to the importance of the matter.

Statement IV.

15. *Statement No. IV.*—Under the head “Government” it will be seen that during 1904-05, 138,435 cases were vaccinated of whom 109,201 were successful. With the exception of the period 1899-1900 when 122,193 were vaccinated, with 112,483 successes, the figures for this year are the highest of the decade; and a yearly improvement can be noted in the number of successes.

Under “Municipal” the figures for the last four years have remained approximately the same, but are markedly less than the figures of the first six years.

“Local funds” shows an almost continual yearly decrease both in the number vaccinated and in the number of successes.

Dispensary vaccination appears to be improving as previously mentioned, and shows a yearly increase during the last four years.

Statement V.

16. *Inspections.*—During the triennium an improvement can be noticed in the total number inspected both by the Deputy Sanitary Commissioner or Civil Surgeons and Native Superintendents or other Inspecting Officers. This is especially marked in the case of Native Superintendents under primary vaccination.

| | | | | | |
|-----------------------|-----|-----|-----|-----|----------|
| 46,882 were inspected | ... | ... | ... | ... | 1902-03. |
| 67,126 were inspected | ... | ... | ... | ... | 1903-04. |
| 73,674 were inspected | ... | ... | ... | ... | 1904-05. |

the percentage to total number vaccinated being respectively 13·22, 17·45, and 19·35.

The percentage of cases found successful to total number inspected by the Deputy Sanitary Commissioner and Civil Surgeons is 83·10, by Native Superintendents 81·13.

The percentage of success reported by vaccinators is 84·71 for 1904-05; for the two previous years the figures are similarly close. It may be concluded from this that the opinion is fairly unanimous as to what a successful vaccination is, and that vaccinators are reporting as successful the true numbers.

The Civil Surgeon, Mergui, inspected 64·57 of primary vaccinations performed in his district; the Civil Surgeon, Thatôn, 62·46, and the Civil Surgeon, Tavoy, 55·90.

On the other hand, the Civil Surgeon, Chin Hills, only inspected 18·6 per cent., and the Civil Surgeon, Southern Shan States, 1·45 per cent.

17. From the reports I find that the attitude of the people generally towards vaccination is one, more of apathetic indifference, than of any active resistance.

As previously noted, inoculation appears to be preferred in many parts, but only in Rangoon is the attitude of the people described as hostile.

I am glad to bring to notice that the Hsipaw *Sawbwa* is described as having shown enthusiasm with regard to vaccinating his people. He has on several occasions addressed large audiences on the subject, and at times a vaccinator accompanies him on his tours through his State.

MAYMYO :
The 9th June 1905. }

R. MACRAE, COL., M.B., I.M.S.,
Superintendent-General of Vaccination,
Burma.

APPENDICES.

| | <i>Page.</i> |
|---|--------------|
| Statement No. I.—Showing particulars of vaccination in the Province of Burma for the year 1904-05 | 8 |
| Statement No. II.—Showing the cost of the Vaccination department in the Province of Burma for the year 1904-05 | 10 |
| Statement No. III.—Showing Dispensary Vaccination in the Province of Burma for the year 1904-05 | 12 |
| Statement No. IV.—Showing the number of persons primarily vaccinated and the number of those persons who were successfully vaccinated in the Province of Burma in each of the undermentioned official years 1895-96 to 1904-05 | 14 |
| Statement No. V.—Showing particulars of vaccination verified by Inspecting Officers ... | <i>ib.</i> |
| Appendix A.—Showing the ratio per 10,000 successfully vaccinated and the mortality from small-pox by quinquennial periods for Lower Burma only | 16 |
| Appendix B.—Statistics relating to the number of children under one year of age in towns available for vaccination and the number of successful operations performed on them | <i>ib.</i> |
| Appendix C.—Diagram showing the proportion of population protected during the seven official years 1898-99 to 1904-05 and the death-rate from small-pox during the calendar year 1904 in districts where registration is in force | 17 |

A.—VACCINATION

STATEMENT NO. I.—*Showing particulars of Vaccination in the*

| No. | Circles and districts. | Popula- tion of district according to census of 1901. | Average popula- tion per square mile. | Average number of vacci- nators employ- ed through- out the year. | Total number of persons vaccinated. | | | Average number of per- sons vacci- nated by each vacci- nator. | PRIMARY VACCINATION. | | | | |
|----------------------|-------------------------------|--|---|---|--|---------|---------|--|----------------------|-----------------------|-----------------------------------|--------------------------|---------------|
| | | | | | | | | | Total. | Successful. | | | Un- known. |
| | | | | | | | | | | Under one year. | One and under six years. | Total of all ages. | |
| 1 | 2 | 3 | 4 | 5 | 6 | | | 7 | 8 | 9 | 10 | 11 | 12 |
| ARAKAN DIVISION. | | | | | | | | | | | | | |
| 1 | Akyab ... | 481,666 | 94 | 10 | 5,482 | 4,669 | 10,151 | 1,015 | 9,776 | 1,150 | 3,801 | 6,483 | 342 |
| 2 | Hill Tracts, Northern Arakan. | 20,632 | 4 | 1 | 412 | 173 | 585 | 585 | 576 | ... | 88 | 532 | ... |
| 3 | Kyaukpau ... | 168,827 | 38 | 6 | 3,020 | 2,833 | 5,853 | 976 | 5,738 | 1,302 | 2,790 | 4,600 | 252 |
| 4 | Sandoway ... | 90,927 | 24 | 3 | 1,261 | 1,045 | 2,306 | 709 | 2,306 | 211 | 896 | 1,938 | 24 |
| | Total ... | 762,102 | 41 | 20 | 10,175 | 8,720 | 18,895 | 945 | 18,396 | 2,663 | 7,575 | 13,603 | 618 |
| PEGU DIVISION. | | | | | | | | | | | | | |
| 5 | Rangoon ... | 252,155 | 8,996 | 4 | 18,070 | 3,299 | 21,369 | 5,342 | 10,764 | 1,343 | 670 | 4,214 | 5,044 |
| 6 | Hanthawaddy ... | 467,537 | 155 | 6 | 2,719 | 2,619 | 5,338 | 890 | 4,722 | 289 | 1,692 | 2,793 | 163 |
| 7 | Pegu ... | 339,572 | 79 | 8 | 5,115 | 4,832 | 9,947 | 1,243 | 9,541 | 1,393 | 5,394 | 7,937 | 351 |
| 8 | Tharrawaddy ... | 395,570 | 139 | 8 | 7,410 | 7,452 | 14,862 | 1,862 | 14,862 | 2,453 | 8,399 | 12,399 | 333 |
| 9 | Prome ... | 365,804 | 125 | 11 | 10,090 | 8,931 | 19,024 | 1,729 | 17,747 | 3,538 | 9,725 | 16,217 | 412 |
| | Total ... | 1,820,638 | 139 | 37 | 43,434 | 27,136 | 70,570 | 1,907 | 57,636 | 9,016 | 25,880 | 43,560 | 6,353 |
| IRRAWADDY DIVISION. | | | | | | | | | | | | | |
| 10 | Ma-ubin ... | 283,347 | 173 | 4 | 1,607 | 1,407 | 3,014 | 754 | 2,960 | 503 | 1,922 | 2,559 | ... |
| 11 | Pyapön ... | 224,939 | 106 | 4 | 1,994 | 1,872 | 3,866 | 967 | 3,712 | 418 | 2,510 | 3,051 | 42 |
| 12 | Bassein* ... | 391,427 | 95 | 10 | 9,913 | 8,401 | 18,314 | 1,831 | 17,454 | 2,985 | 9,178 | 14,939 | 683 |
| 13 | hienzada ... | 454,558 | 163 | 15 | 19,523 | 19,670 | 39,193 | 2,613 | 33,840 | 6,608 | 21,586 | 36,124 | 91 |
| 14 | Myaungmya ... | 279,398 | 105 | 6 | 4,179 | 4,225 | 8,404 | 1,401 | 7,665 | 1,437 | 4,316 | 7,038 | 70 |
| | Total ... | 1,663,669 | 124 | 39 | 37,216 | 35,575 | 72,791 | 1,866 | 70,631 | 11,951 | 39,542 | 63,714 | 886 |
| TENASSERIM DIVISION. | | | | | | | | | | | | | |
| 15 | Amherst ... | 300,173 | 43 | 8 | 9,640 | 7,252 | 16,892 | 2,112 | 16,253 | 2,991 | 7,169 | 14,785 | 56 |
| 16 | Tavoy ... | 109,949 | 21 | 5 | 7,105 | 6,512 | 13,617 | 2,723 | 11,068 | 2,172 | 5,172 | 10,588 | 97 |
| 17 | Mergui ... | 88,744 | 9 | 4 | 3,354 | 3,176 | 6,530 | 1,633 | 6,520 | 761 | 2,371 | 5,417 | 47 |
| 18 | Toungoo ... | 279,315 | 45 | 7 | 5,470 | 4,841 | 10,311 | 1,473 | 9,894 | 5,243 | 2,630 | 8,765 | 65 |
| 19 | Thaton ... | 343,510 | 68 | 6 | 1,971 | 1,995 | 3,966 | 661 | 3,966 | 654 | 1,492 | 2,746 | ... |
| 20 | Salween ... | 37,837 | 14 | 1 | 626 | 432 | 1,058 | 1,058 | 1,058 | 11 | 162 | 563 | ... |
| | Total ... | 1,159,558 | 32 | 31 | 23,166 | 21,208 | 52,374 | 1,689 | 48,759 | 11,830 | 18,999 | 42,884 | 245 |
| MANDALAY DIVISION. | | | | | | | | | | | | | |
| 21 | Mandalay ... | 366,507 | 173 | 8 | 7,231 | 7,231 | 14,512 | 1,814 | 13,665 | 5,921 | 4,663 | 11,270 | 158 |
| 22 | Bhamo ... | 79,515 | 19 | 3 | 1,904 | 1,759 | 3,663 | 1,221 | 3,142 | 1,230 | 969 | 2,537 | 326 |
| 23 | Katha ... | 176,223 | 25 | 2 | 1,233 | 1,290 | 2,573 | 1,287 | 2,573 | 191 | 1,335 | 2,210 | 10 |
| 24 | Ruby Mines ... | 87,694 | 16 | 3 | 1,233 | 1,147 | 2,380 | 793 | 2,380 | 1,027 | 817 | 2,009 | 57 |
| 25 | Myitkyina ... | 67,399 | 6 | 1 | 503 | 506 | 1,009 | 1,009 | 992 | 135 | 412 | 802 | 12 |
| | Total ... | 777,338 | 26 | 17 | 12,154 | 11,933 | 24,137 | 1,420 | 22,752 | 8,504 | 8,259 | 18,823 | 563 |
| SAGAING DIVISION. | | | | | | | | | | | | | |
| 26 | Shwebo ... | 236,891 | 51 | 8 | 8,303 | 8,513 | 16,816 | 2,102 | 16,577 | 3,371 | 8,243 | 14,676 | 711 |
| 27 | Sagaing ... | 222,658 | 152 | 6 | 6,123 | 6,479 | 12,602 | 2,100 | 12,004 | 3,949 | 5,027 | 9,006 | 32 |
| 28 | Lower Chindwin ... | 276,383 | 79 | 6 | 6,800 | 7,340 | 14,140 | 2,357 | 14,037 | 2,795 | 6,712 | 11,080 | 78 |
| 29 | Upper Chindwin ... | 154,551 | 18 | 6 | 5,308 | 5,746 | 11,054 | 1,812 | 11,054 | 845 | 5,296 | 9,462 | 254 |
| | Total ... | 1,000,483 | 33 | 26 | 26,531 | 23,078 | 54,612 | 2,100 | 53,672 | 10,993 | 25,278 | 44,224 | 1,075 |
| MINBU DIVISION. | | | | | | | | | | | | | |
| 30 | Thayetmyo ... | 239,706 | 50 | 8 | 9,901 | 8,962 | 18,863 | 2,353 | 16,836 | 1,797 | 7,333 | 12,584 | 2,825 |
| 31 | Pakokku ... | 556,489 | 57 | 6 | 4,277 | 4,211 | 8,588 | 1,423 | 8,185 | 1,080 | 4,533 | 5,877 | 310 |
| 32 | Minbu ... | 233,377 | 71 | 6 | 4,027 | 3,578 | 7,605 | 1,268 | 7,288 | 1,129 | 2,87 | 4,243 | 265 |
| 33 | Magwe ... | 246,708 | 85 | 7 | 5,567 | 5,474 | 11,041 | 1,577 | 10,894 | 2,845 | 6,929 | 9,906 | 61 |
| | Total ... | 1,076,280 | 63 | 27 | 23,772 | 22,275 | 46,017 | 1,705 | 43,203 | 6,851 | 20,932 | 32,610 | 3,451 |
| MEIKTILA DIVISION. | | | | | | | | | | | | | |
| 34 | Meiktila ... | 252,305 | 116 | 5 | 5,432 | 5,279 | 10,711 | 2,142 | 10,690 | 937 | 6,795 | 8,491 | 152 |
| 35 | Yamethin ... | 213,197 | 57 | 7 | 5,899 | 5,756 | 11,655 | 1,685 | 10,766 | 4,797 | 4,581 | 9,880 | 67 |
| 36 | Kyaukse ... | 111,253 | 111 | 3 | 2,909 | 3,024 | 5,933 | 1,978 | 5,765 | 3,099 | 1,731 | 4,830 | 188 |
| 37 | Myingyan ... | 358,052 | 114 | 7 | 6,848 | 6,670 | 13,518 | 1,931 | 12,721 | 2,190 | 4,563 | 7,616 | 222 |
| | Total ... | 992,807 | 91 | 22 | 21,088 | 20,729 | 41,817 | 1,901 | 39,942 | 11,023 | 17,670 | 30,817 | 1,200 |
| SHAN STATES. | | | | | | | | | | | | | |
| 38 | Northern Shan States ... | 321,090 | 22 | 8 | 3,571 | 3,442 | 7,013 | 877 | 7,013 | 85 | 3,179 | 4,887 | 136 |
| 39 | Southern Shan States ... | 816,354 | 19 | 5 | 3,924 | 4,000 | 7,924 | 1,585 | 7,924 | 1,499 | 3,268 | 5,945 | 91 |
| | Total ... | 1,137,444 | 20 | 13 | 7,495 | 7,442 | 14,937 | 1,149 | 14,937 | 1,584 | 6,447 | 10,832 | 227 |
| CHIN HILLS. | | | | | | | | | | | | | |
| 40 | Chin Hills ... | 87,189 | 11 | 1 | 736 | 525 | 1,261 | 1,261 | 1,242 | 17 | 112 | 912 | 36 |
| | GRAND TOTAL FOR 1904-05. | 10,477,508 | 45 | 233 | 210,770 | 186,671 | 397,441 | 1,766 | 371,170 | 74,432 | 170,744 | 301,984 | 14,663 |
| | GRAND TOTAL for 1903-04 | 10,477,508 | 45 | 224 | 207,861 | 190,773 | 398,634 | 1,780 | 375,798 | 78,266 | 178,929 | 320,035 | 8,796 |
| | GRAND TOTAL for 1902-03 | 10,477,508 | 45 | 213 | 191,410 | 179,100 | 370,510 | 1,739 | 348,007 | 78,674 | 167,376 | 303,251 | ... |

NOTE.—Area and population of the
* Exclusive of 213 cases operated by a private vaccinator,

DEPARTMENT.

Province of Burma during the year 1904-05 (paragraphs 1 to 4 and 8).

| RE-VACCINATION. | | | PERCENTAGE OF SUCCESSFUL CASES IN WHICH THE RESULTS WERE KNOWN. | | Persons successfully vaccinated per 1,000 of population. | PERCENTAGE OF UNKNOWN CASES TO TOTAL CASES. | | AVERAGE ANNUAL NUMBER OF PERSONS SUCCESSFULLY VACCINATED DURING PREVIOUS FIVE YEARS. | | AVERAGE ANNUAL NUMBER OF DEATHS FROM SMALL-POX DURING PREVIOUS FIVE YEARS. | |
|-------------------------------------|---------------------------------|----------------------------|---|---|--|---|-------------------------------------|--|--|--|--|
| Total. | Successful. | Unknown. | Primary. | Re-vaccination. | | Primary. | Re-vaccination. | No. | Ratio per 1,000. | No. | Ratio per 1,000. |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 375 9 | 183 7 | ... | 68·72 92·36 | 48·8 77·78 | 13·84 26·06 | 3·50 ... | ... | 7,516 1,095 | 16·50 59·95 | 9 ... | ·02 ... |
| 115 ... | 90 ... | 1 ... | 83·85 87·12 | 78·95 ... | 27·78 21·86 | 4·39 1·04 | ·87 ... | 8,254 5,003 | 49·48 58·22 | 93 20 | ·56 ·23 |
| 499 | 280 | 1 | 76·52 | 56·22 | 18·22 | 3·36 | ·20 | 21,868 | 30·10 | 122 | ·17 |
| 10,605 616 406 30 1,277 | 2,800 102 282 4 524 | 5,580 6 1 2 75 | 73·67 61·26 86·37 85·63 93·55 | 55·72 16·72 69·63 14·29 43·59 | 6·19 27·82 24·20 31·35 45·76 | 46·86 3·45 3·8 258 2·32 | 52·62 ·97 ·25 6·67 5·87 | 4,416 7,124 10,992 13,494 22,181 | 20·91 15·84 36·74 36·17 60·43 | 277 310 341 154 47 | 1·30 ·69 1·14 ·41 ·13 |
| 12,934 | 3,712 | 5,661 | 84·94 | 51·06 | 25·96 | 11·02 | 43·79 | 58,247 | 34·22 | 1,128 | ·66 |
| 54 154 860 353 739 | ... | 17 ... | 86·45 83·22 89·08 93·23 92·67 | ... | 9·03 13·71 38·71 74·85 26·91 | ... | 31·48 1·13 3·91 ·23 ·91 | 12,197 16,160 38,588 9,413 | 28·76 44·4 82·85 35·47 | 296 161 176 223 | ·70 ·44 ·33 ·84 |
| 2,160 | 868 | 240 | 91·35 | 45·21 | 38·82 | 1·25 | 11·11 | 76,348 | 50·29 | 856 | ·56 |
| 639 2,549 10 417 ... | 196 558 ... | 56 ... | 91·17 90·51 83·69 89·33 69·24 53·21 | 33·62 21·89 ... | 49·91 101·85 61·4 32·17 7·99 11·88 | ·22 ·88 ·72 ·66 ... | 8·76 ... | 16,107 14,275 4,298 9,648 8,345 610 | 58·89 137·3 51·94 38·24 26·72 17·30 | 142 181 119 87 170 ... | ·53 1·74 1·57 ·37 ·56 ... |
| 3,615 | 954 | 56 | 88·40 | 26·81 | 37·81 | ·50 | 1·55 | 53,263 | 5·23 | 698 | ·71 |
| 847 521 ... | 363 342 ... | 2 27 ... | 83·44 90·09 86·23 86·48 81·84 | 42·96 69·23 ... | 31·74 36·21 12·54 22·91 11·91 | 1·16 10·33 ·39 2·39 1·21 | ·24 5·18 ... | 14,495 2,665 2,080 3,114 843 | 39·18 4·33 12·88 47·12 13·86 | 70 ... | ·20 ... |
| 1,335 | 706 | 29 | 84·85 | 52·06 | 25·13 | 2·47 | 2·09 | 23,198 | 32·09 | 70 | ... |
| 239 598 103 ... | 153 343 46 ... | 7 8 ... | 92·50 75·23 79·38 87·61 | 65·95 58·93 44·66 ... | 51·69 33·09 46·26 61·22 | 4·29 ·27 ·56 2·30 | 2·93 1·34 ... | 15,343 8,115 8,836 7,624 | 58·02 31·27 34·10 55·51 | 11 81 113 ... | ·04 ·30 ·54 ... |
| 910 | 547 | 15 | 84·08 | 53·14 | 44·75 | 2·00 | 1·60 | 39,919 | 42·97 | 204 | .. |
| 2,027 353 317 147 | 1,263 17 132 73 | 113 46 73 69 | 89·82 74·63 61·42 91·36 | 65·99 5·54 54·10 93·59 | 57·77 16·53 18·75 40·45 | 16·78 3·79 3·64 ·47 | 5·57 13·03 23·03 66·94 | 19,668 5,847 7,147 8,531 | 80·64 1·27 31·59 36·19 | 69 293 182 195 | ·30 1·06 ·98 ·83 |
| 2,844 | 1,485 | 301 | 82·03 | 58·40 | 31·68 | 7·99 | 10·58 | 41,193 | 39·44 | 739 | ·80 |
| 21 889 163 797 | 16 397 155 200 | 1 357 2 25 | 80·58 97·64 86·61 60·93 | 80·00 74·62 93·37 25·91 | 33·72 42·26 35·29 21·95 | 1·42 6·01 3·26 1·75 | 4·76 40·16 1·19 3·14 | 5,802 9,075 5,864 10,136 | 24·35 31·71 43·45 23·61 | 35 112 2 165 | ·18 ·56 ·01 ·45 |
| 1,875 | 768 | 335 | 79·56 | 51·54 | 31·81 | 3·03 | 20·53 | 30,396 | 32·80 | 314 | ·35 |
| ... | ... | ... | 71·06 75·90 | ... | 15·22 7·28 | 1·91 1·15 | ... | ... | ... | ... | ... |
| ... | ... | ... | 73·64 | ... | 9·52 | 1·52 | ... | 9,313 | 11·13 | ... | ... |
| 19 | ... | ... | 75·62 | ... | 10·46 | 2·90 | ... | ... | ... | ... | ... |
| 26,271 | 9,320 | 6,691 | 84·71 | 47·60 | 29·71 | 3·95 | 25·47 | 354,265 | 37·13 | ... | ... |
| 22,836 | 9,727 | 5,142 | 87·20 | 54·97 | 31·47 | 2·34 | 22·52 | 374,834 | 41·29 | ... | ... |
| 22,503 | 10,539 | ... | 87·14 | 46·83 | 29·95 | ... | ... | 390,422 | 37·26 | ... | ... |

Pakokku Chin Hills have been excluded, of which 163 were found successful.

A.—VACCINATION

STATEMENT NO. II.—*Showing the cost of the Department in the*

| Number. | Circles and districts. | EXPENDITURE. | | | | | | | | | | |
|----------------------|---------------------------------|-------------------------------------|-----------|-----------------------------------|-------------|--------------|-------------|---------|-----------|-------------|------------|-------------------------------------|
| | | European super- vising officers. | Pay. | Native supervis- ing officers. | Pay. | Vaccinators. | Pay. | Clerks. | Pay. | Peons, etc. | Pay. | Total pay of establish- ment. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| ARAKAN DIVISION. | | | | | | | | | | | | |
| | | | Rs. A. P. | | Rs. A. P. | | Rs. A. P. | | Rs. A. P. | | Rs. A. P. | Rs. A. P. |
| 1 | Akyab ... | ... | ..... | 2 | 900 0 0 | 10 | 2,678 2 11 | ... | ..... | ... | ..... | 3,578 2 11 |
| 2 | Hill Tracts, Northern Arakan... | ... | ..... | ... | ..... | 1 | 360 0 0 | ... | ..... | ... | ..... | 360 0 0 |
| 3 | Kyaukpyu ... | ... | ..... | ... | ..... | 6 | 1,466 7 8 | ... | ..... | ... | ..... | 1,466 7 8 |
| 4 | Sandoway ... | ... | ..... | ... | ..... | 3 | 880 0 0 | ... | ..... | ... | ..... | 880 0 0 |
| | Total ... | ... | ..... | 2 | 900 0 0 | 20 | 5,334 10 7 | ... | ..... | ... | ..... | 6,284 10 7 |
| PEGU DIVISION. | | | | | | | | | | | | |
| 5 | Rangoon ... | ... | ..... | ... | ..... | 4 | 2,371 10 4 | ... | ... | 4 | 433 9 4 | 2,805 3 8 |
| 6 | Hanthawaddy ... | ... | ..... | 1 | 600 0 0 | 6 | 1,473 5 3 | ... | ..... | ... | ..... | 2,073 5 3 |
| 7 | Pegu ... | ... | ..... | ... | ..... | 8 | 2,054 5 0 | ... | ..... | ... | ..... | 2,054 5 0 |
| 8 | Tharrawaddy ... | ... | ..... | 1 | 480 0 0 | 8 | 2,525 0 0 | ... | ..... | ... | ..... | 2,805 0 0 |
| 9 | Prome ... | ... | ..... | ... | ..... | 11 | 3,072 15 5 | ... | ..... | ... | ..... | 3,072 15 5 |
| | Total ... | ... | ..... | 2 | 1,080 0 0 | 37 | 11,297 4 0 | ... | ..... | 4 | 433 9 4 | 12,810 13 4 |
| IRRAWADDY DIVISION. | | | | | | | | | | | | |
| 10 | Ma-ubin ... | ... | ..... | ... | ..... | 4 | 1,340 15 3 | ... | ..... | ... | ..... | 1,340 15 3 |
| 11 | Pyapôn ... | ... | ..... | ... | ..... | 4 | 1,378 0 0 | ... | ..... | ... | ..... | 1,378 0 0 |
| 12 | Bassein ... | ... | ..... | 2 | 699 12 0 | 10 | 2,205 5 1 | ... | ..... | ... | ..... | 2,905 11 1 |
| 13 | Henzada ... | ... | ..... | ... | ..... | 15 | 4,278 11 0 | ... | ..... | ... | ..... | 4,278 11 0 |
| 14 | Myaungmya ... | ... | ..... | ... | ..... | 6 | 1,530 4 1 | ... | ..... | ... | ..... | 1,530 4 1 |
| | Total ... | ... | ..... | 2 | 699 12 0 | 39 | 10,733 13 5 | ... | ..... | ... | ..... | 11,433 9 |
| TENASSERIM DIVISION. | | | | | | | | | | | | |
| 15 | Amherst ... | ... | ..... | 2 | 1,344 12 11 | 8 | 2,007 4 7 | 1 | 120 0 0 | ... | ..... | 3,472 1 6 |
| 16 | Tavoy ... | ... | ..... | ... | ..... | 5 | 1,440 0 0 | ... | ..... | ... | ..... | 1,440 0 0 |
| 17 | Mergui ... | ... | ..... | ... | ..... | 4 | 1,075 0 0 | ... | ..... | ... | ..... | 1,075 0 0 |
| 18 | Toungoo ... | ... | ..... | 1 | 480 0 0 | 7 | 1,542 15 6 | ... | ..... | ... | ..... | 2,022 15 6 |
| 19 | Thatôn ... | ... | ..... | 1 | 480 0 0 | 6 | 1,593 1 5 | ... | ..... | ... | ..... | 2,073 1 5 |
| 20 | Salween ... | ... | ..... | ... | ..... | 1 | 300 0 0 | ... | ..... | ... | ..... | 300 0 0 |
| | Total ... | ... | ..... | 4 | 2,304 12 11 | 31 | 7,958 5 6 | 1 | 120 0 0 | ... | ..... | 10,333 2 5 |
| MANDALAY DIVISION. | | | | | | | | | | | | |
| 21 | Mandalay ... | ... | ..... | 1 | 600 0 0 | 8 | 2,273 1 8 | ... | ..... | ... | ..... | 2,873 1 8 |
| 22 | Bhamo ... | ... | ..... | ... | ..... | 3 | 716 0 0 | ... | ..... | ... | ..... | 716 0 0 |
| 23 | Katha ... | ... | ..... | ... | ..... | 2 | 392 0 7 | ... | ..... | ... | ..... | 392 0 7 |
| 24 | Ruby Mines ... | ... | ..... | ... | ..... | 3 | 845 15 1 | ... | ..... | ... | ..... | 845 15 1 |
| 25 | Myitkyina ... | ... | ..... | ... | ..... | 1 | 360 0 0 | ... | ..... | ... | ..... | 360 0 0 |
| | Total ... | ... | ..... | 1 | 600 0 0 | 17 | 4,587 1 4 | ... | ..... | ... | ..... | 5,187 1 4 |
| SAGAING DIVISION. | | | | | | | | | | | | |
| 26 | Shwebo ... | ... | ..... | ... | ..... | 8 | 1,642 3 1 | ... | ..... | ... | ..... | 1,642 3 1 |
| 27 | Sagaing ... | ... | ..... | ... | ..... | 6 | 1,421 0 0 | ... | ..... | ... | ..... | 1,421 0 0 |
| 28 | Lower Chindwin ... | ... | ..... | ... | ..... | 6 | 1,574 15 11 | ... | ..... | ... | ..... | 1,574 15 11 |
| 29 | Upper Chindwin ... | ... | ..... | ... | ..... | 6 | 1,464 0 0 | ... | ..... | ... | ..... | 1,464 0 0 |
| | Total ... | ... | ..... | ... | ..... | 26 | 6,102 3 0 | ... | ..... | ... | ..... | 6,102 3 0 |
| MINBU DIVISION. | | | | | | | | | | | | |
| 30 | Thayetmyo ... | ... | ..... | ... | ..... | 8 | 2,188 10 3 | ... | ..... | ... | ..... | 2,188 10 3 |
| 31 | Pakókku ... | ... | ..... | ... | ..... | 6 | 1,453 0 0 | ... | ..... | ... | ..... | 1,453 0 0 |
| 32 | Minbu ... | ... | ..... | ... | ..... | 6 | 1,570 6 7 | ... | ..... | ... | ..... | 1,570 6 7 |
| 33 | Magwe ... | ... | ..... | 1 | 110 0 0 | 7 | 1,302 0 0 | ... | ..... | ... | ..... | 1,412 0 0 |
| | Total ... | ... | ..... | 1 | 110 0 0 | 27 | 6,514 0 10 | ... | ..... | ... | ..... | 6,624 0 10 |
| MEIKTILA DIVISION. | | | | | | | | | | | | |
| 34 | Meiktila Vaccine Depôt ... | 1 | 461 4 8 | 1 | 914 5 8 | ... | ..... | 1 | 600 0 0 | 8 | 1,226 0 0 | 3,231 10 4 |
| 35 | Meiktila ... | ... | ..... | ... | ..... | 5 | 1,211 6 8 | ... | ..... | ... | ..... | 1,201 6 8 |
| 36 | Yaméthin ... | ... | ..... | 1 | 60 0 0 | 7 | 1,741 15 7 | ... | ..... | ... | ..... | 1,811 15 7 |
| 37 | Kyaukse ... | ... | ..... | ... | ..... | 3 | 799 10 0 | ... | ..... | ... | ..... | 799 10 0 |
| 38 | Myingyan ... | ... | ..... | 1 | 300 0 0 | 7 | 1,469 4 1 | ... | ..... | ... | ..... | 1,769 4 1 |
| | Total ... | 1 | 461 4 8 | 3 | 1,274 5 8 | 22 | 5,212 4 4 | 1 | 600 0 0 | 8 | 1,226 0 0 | 8,773 14 8 |
| SHAN STATES. | | | | | | | | | | | | |
| 39 | Northern Shan States ... | ... | ..... | 1 | 402 0 0 | 8 | 1,897 5 6 | ... | ..... | ... | ..... | 2,299 5 6 |
| 40 | Southern Shan States ... | ... | ..... | ... | ... | 5 | 1,29 0 0 | ... | ..... | ... | ..... | 1,129 0 0 |
| | Total ... | ... | ..... | 1 | 402 0 0 | 13 | 3,026 5 6 | ... | ..... | ... | ..... | 3,423 5 6 |
| CHIN HILLS | | | | | | | | | | | | |
| 41 | Chin Hills ... | ... | ..... | ... | ..... | 1 | 304 8 0 | ... | ..... | ... | ..... | 304 8 0 |
| | Total ... | ... | ..... | ... | ..... | 1 | 304 8 0 | ... | ..... | ... | ..... | 304 8 0 |
| | GRAND TOTAL FOR 1904-05 ... | 1 | 461 4 8 | 16 | 7,370 14 7 | 233 | 61,120 8 6 | 2 | 720 0 0 | 12 | 1,659 9 4 | 71,332 5 1 |
| | GRAND TOTAL FOR 1903-04 ... | 1 | 40 6 11 | 15 | 6,537 10 9 | 224 | 55,199 3 3 | 2 | 835 2 9 | 11 | 1,352 13 7 | 63,965 5 3 |
| | GRAND TOTAL FOR 1902-03 ... | ... | ..... | 15 | 6,635 15 7 | 213 | 52,727 10 3 | 2 | 604 10 9 | 9 | 1,310 15 1 | 61,279 3 8 |

DEPARTMENT.

Province of Burma during the year 1904-05 (paragraphs 10 and 11).

| | | | PAID FROM | | | | | Total. | Number of all successful vaccinations and re-vaccinations. | Average cost of each successful case. |
|--|--|---|--|--|---|--|--|---|--|--|
| Travelling allowance. | Contingen- cies. | Total cost. | Imperial funds. | Provincial funds. | Local funds. | Municipal- ities. | Native States. | | | |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Rs. A. P. | Rs. A. P. | Rs. A. P. | Rs. A. P. | Rs. A. P. | Rs. A. P. | Rs. A. P. | Rs. A. P. | Rs. A. P. | | Rs. A. P. |
| 701 12 10 44 14 3 501 2 0 202 11 6 | 104 6 6 | 4,384 6 3 404 14 3 1,967 9 8 1,082 11 6 | ..... ..... ..... ..... | ..... 404 14 3 | 3,992 8 3 1,847 9 8 952 11 6 | 391 14 0 120 0 0 120 0 0 | ..... ..... ..... ..... | 4,384 6 3 404 14 3 1,967 9 8 1,082 11 6 | 6,666 539 4,690 1,938 | 0 10 6 0 12 0 0 6 9 0 8 9 |
| 1,450 8 7 | 104 6 6 | 7,839 9 8 | ..... | 404 14 3 | 6,802 13 5 | 631 14 0 | ..... | 7,839 9 8 | 13,883 | 0 9 0 |
| 167 4 10 943 11 2 603 10 6 950 13 0 930 15 0 | 2,422 12 3 54 14 5 | 5,395 4 9 3,017 0 5 2,662 15 6 3,755 13 0 4,108 12 10 | ..... ..... ..... ..... ..... | 431 12 10 | 3,017 0 5 2,122 15 6 3,755 13 0 3,304 0 5 | 4,963 7 11 540 0 0 804 12 5 | ..... ..... ..... ..... ..... | 5,395 4 9 3,017 0 5 2,662 15 6 3,755 13 0 4,108 12 10 | 7,014 2,895 8,219 12,403 16,741 | 0 12 4 1 0 8 0 5 2 0 4 10 0 3 11 |
| 3,651 6 6 | 2,477 10 8 | 18,939 14 6 | ..... | 431 12 10 | 12,199 13 4 | 6,308 4 4 | ..... | 18,939 14 6 | 47,272 | 0 6 5 |
| 137 9 0 236 4 7 974 12 10 1,257 10 0 401 1 8 | 18 2 1 33 1 0 6 6 0 | 1,478 8 3 1,614 4 7 3,898 10 0 5,569 6 0 1,937 11 9 | ..... ..... ..... ..... ..... | ..... ..... ..... ..... ..... | 1,473 8 3 1,614 4 7 3,214 10 3 3,860 6 0 1,937 11 9 | 633 15 9 1,709 0 0 ..... | ..... ..... ..... ..... ..... | 1,478 8 3 1,614 4 7 3,898 10 0 5,569 6 0 1,937 11 9 | 2,559 3,085 15,151 36,268 7,519 | 0 9 3 0 8 4 0 4 1 0 2 5 0 4 1 |
| 3,007 6 1 | 57 9 1 | 14,498 8 7 | ..... | ..... | 12,105 8 10 | 2,392 15 9 | ..... | 14,498 8 7 | 64,582 | 0 3 7 |
| 1,020 1 0 450 12 0 375 14 1 725 15 6 522 6 3 73 2 0 | 191 11 6 77 7 0 | 4,683 14 0 1,890 12 0 1,450 14 1 2,826 6 0 2,595 7 8 373 2 0 | ..... ..... ..... ..... ..... ..... | ..... ..... ..... ..... ..... ..... | 3,478 2 6 1,397 4 0 1,210 14 1 2,346 6 0 2,335 7 8 373 2 0 | 1,205 11 6 493 8 0 240 0 0 480 0 0 260 0 4 .... | ..... ..... ..... ..... ..... ..... | 4,683 14 0 1,890 12 0 1,450 14 1 2,826 6 0 2,595 7 8 373 2 0 | 14,931 11,146 5,417 8,985 2,746 563 | 0 5 0 0 2 9 0 4 3 0 5 0 0 15 1 0 10 7 |
| 3,168 2 10 | 269 2 6 | 13,820 7 9 | ..... | ..... | 11,141 4 3 | 2,679 3 6 | ..... | 13,820 7 9 | 43,838 | 0 5 1 |
| 422 12 6 212 5 0 166 10 3 231 15 0 127 14 11 | 92 5 11 1 14 0 2 15 0 | 3,388 4 1 930 3 0 558 10 10 1,077 14 1 490 13 11 | ..... ..... ..... ..... ..... | 1,633 9 6 676 0 0 558 10 10 711 11 8 490 13 11 | ..... ..... ..... ..... ..... | 1,754 10 7 251 3 0 | 366 2 5 | 3,388 4 1 930 3 0 558 10 10 1,077 14 1 490 13 11 | 11,633 2,879 2,210 2,009 803 | 0 4 8 0 5 2 0 4 1 0 8 7 0 9 9 |
| 1,161 9 8 | 97 2 11 | 6,445 13 11 | ..... | 4,070 13 11 | ..... | 2,008 13 7 | 366 2 5 | 6,445 13 11 | 19,534 | 0 5 3 |
| 338 12 9 602 14 6 246 5 4 719 2 0 | 50 5 0 20 1 10 | 1,930 15 10 2,113 14 6 1,871 10 3 2,203 3 10 | ..... ..... ..... ..... | 1,753 7 10 2,113 14 6 1,585 10 3 2,203 3 10 | ..... ..... ..... ..... | 227 8 0 236 0 0 ..... | ..... ..... ..... ..... | 1,930 15 10 2,113 14 6 1,871 10 3 2,203 3 10 | 14,829 9,354 11,126 9,462 | 0 2 2 0 3 7 0 2 8 0 3 9 |
| 1,997 2 7 | 70 6 10 | 8,169 12 5 | ..... | 7,656 4 5 | ..... | 513 8 0 | ..... | 8,169 12 5 | 44,771 | 0 2 11 |
| 877 7 0 599 4 0 335 11 0 360 14 0 | 55 9 0 11 3 0 17 4 0 | 3,066 1 3 2,107 13 0 1,967 4 7 1,790 2 0 | ..... ..... ..... ..... | ..... 1,820 8 0 1,332 8 3 1,472 14 0 | 2,531 3 10 | 531 13 5 237 5 0 634 12 4 317 4 0 | ..... ..... ..... ..... | 3,066 1 3 2,107 13 0 1,967 4 7 1,790 2 0 | 13,847 5,894 4,375 9,979 | 0 3 7 0 5 9 0 7 2 0 2 10 |
| 2,223 4 0 | 84 0 0 | 8,931 4 10 | ..... | 4,625 14 3 | 2,531 3 10 | 1,774 2 9 | ..... | 8,931 4 10 | 34,095 | 0 4 2 |
| 751 10 6 619 15 3 285 10 0 638 6 6 | 4,404 2 9 2 15 0 5 5 8 | 7,605 13 1 1,953 1 2 2,424 13 10 1,035 4 0 2,413 0 3 | ..... ..... ..... ..... ..... | 7,605 13 1 1,953 1 2 1,824 13 10 1,035 4 0 2,177 8 3 | ..... ..... ..... ..... ..... | ..... 600 0 0 235 8 0 ..... | ..... ..... ..... ..... ..... | 7,605 13 1 1,953 1 2 2,424 13 10 1,035 4 0 2,413 0 3 | 8,507 10,277 4,935 7,816 | 0 3 8 0 3 9 0 3 6 0 4 11 |
| 2,295 10 3 | 4,412 7 5 | 15,482 0 4 | ..... | 14,646 8 4 | ..... | 835 8 0 | ..... | 15,482 0 4 | 31,585 | 0 7 10 |
| 1,577 2 6 615 9 0 | 10 0 9 | 3,876 8 0 1,751 9 9 | 1,151 14 6 1,751 9 9 | ..... ..... | ..... ..... | ..... ..... | 2,721 9 6 | 3,876 8 0 1,751 9 9 | 4,887 5,945 | 0 12 8 0 4 9 |
| 2,192 11 6 | 10 0 9 | 5,631 1 9 | 2,906 8 3 | ..... | ..... | ..... | 2,721 9 6 | 5,631 1 9 | 10,832 | 0 8 4 |
| 86 8 0 | ..... | 391 0 0 | 391 0 0 | ..... | ..... | ..... | ..... | 391 0 0 | 912 | 0 6 10 |
| 86 8 0 | ..... | 391 0 0 | 391 0 0 | ..... | ..... | ..... | ..... | 391 0 0 | 912 | 0 6 10 |
| 21,234 6 0 | 7,582 14 8 | 1,00,149 9 9 | 3,297 8 3 | 31,836 4 0 | 41,780 11 8 | 17,144 5 11 | 3,090 11 11 | 1,00,149 9 9 | 311,304 | 0 5 2 |
| 21,670 10 2 | 8,695 2 7 | 94,331 2 0 | 3,736 14 4 | 29,853 8 4 | 41,207 14 7 | 16,156 0 0 | 3,376 12 9 | 94,331 2 0 | 83,29,762 | 0 4 7 |
| 15,856 14 0 | 8,692 9 6 | 85,825 11 2 | 3,424 15 2 | 23,039 11 7 | 39,293 13 1 | 17,027 6 7 | 2,442 12 9 | 85,823 11 2 | 313,790 | 0 4 5 |

B.—DISPENSARY

STATEMENT NO. III.—*Showing Dispensary Vaccination in the*

| No. | Districts. | Number of dispensaries in each district to which a vacci- nator is at- tached. | Average number of vaccinators attached to dispensaries during the year. | Total number of persons vaccinated. | Average number of persons vaccinated by each vacci- nator. | Total. |
|----------------------|-------------------------------------|---|--|---|--|--------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ARAKAN DIVISION. | | | | | | |
| 1 | Akyab ... .. | ..... | ..... | ..... | ..... | ..... |
| 2 | Hill Tracts, Northern Arakan ... .. | ..... | ..... | 7 | ..... | 7 |
| 3 | Kyaukpyu .. .. | ..... | ..... | 567 | ..... | 528 |
| 4 | Sandoway ... .. | ..... | ..... | 209 | ..... | 198 |
| | Total ... .. | ..... | ..... | 783 | ..... | 733 |
| PEGU DIVISION. | | | | | | |
| 5 | Rangoon ... .. | ..... | ..... | ..... | ..... | ..... |
| 6 | Hanthawaddy ... .. | ..... | ..... | 2,230 | ..... | 360 |
| 7 | Pegu ... .. | ..... | ..... | 427 | ..... | 415 |
| 8 | Tharrawaddy ... .. | ..... | ..... | 55 | ..... | 55 |
| 9 | Prome ... .. | ..... | ..... | 95 | ..... | 95 |
| | Total ... .. | ..... | ..... | 2,807 | ..... | 925 |
| IRRAWADDY DIVISION. | | | | | | |
| 10 | Ma-ubin ... .. | ..... | ..... | 2,457 | ..... | 823 |
| 11 | Pyapon ... .. | ..... | ..... | 261 | ..... | 172 |
| 12 | Bassein ... .. | ..... | ..... | 457 | ..... | 287 |
| 13 | Henzada ... .. | ..... | ..... | 1,144 | ..... | 722 |
| 14 | Myaungmya ... .. | ..... | ..... | 1,262 | ..... | 834 |
| | Total ... .. | ..... | ..... | 5,581 | ..... | 2,838 |
| TENASSERIM DIVISION. | | | | | | |
| 15 | Amherst ... .. | ..... | ..... | ..... | ..... | ..... |
| 16 | Tavoy ... .. | ..... | ..... | 423 | ..... | 228 |
| 17 | Mergui ... .. | ..... | ..... | 297 | ..... | 297 |
| 18 | Toungoo ... .. | ..... | ..... | 287 | ..... | 35 |
| 19 | Thaton ... .. | ..... | ..... | ..... | ..... | ..... |
| 20 | Salween ... .. | ..... | ..... | 16 | ..... | 16 |
| | Total ... .. | ..... | ..... | 1,023 | ..... | 576 |
| MANDALAY DIVISION. | | | | | | |
| 21 | Mandalay ... .. | ..... | ..... | 227 | ..... | 216 |
| 22 | Bhamo ... .. | ..... | ..... | 122 | ..... | 109 |
| 23 | Katha ... .. | ..... | ..... | 234 | ..... | 45 |
| 24 | Ruby Mines... .. | ..... | ..... | 6 | ..... | 6 |
| 25 | Myitkyina ... .. | ..... | ..... | 71 | ..... | 61 |
| | Total ... .. | ..... | ..... | 660 | ..... | 437 |
| SAGAING DIVISION. | | | | | | |
| 26 | Shwebo ... .. | ..... | ..... | 14 | ..... | 14 |
| 27 | Sagaing ... .. | ..... | ..... | 125 | ..... | 112 |
| 28 | Lower Chindwin ... .. | ..... | ..... | 35 | ..... | 35 |
| 29 | Upper Chindwin ... .. | ..... | ..... | 302 | ..... | 302 |
| | Total ... .. | ..... | ..... | 476 | ..... | 463 |
| MINBU DIVISION. | | | | | | |
| 30 | Thayetmyo ... .. | ..... | ..... | 1,191 | ..... | 1,111 |
| 31 | Pakokku ... .. | ..... | ..... | 230 | ..... | 230 |
| 32 | Minbu ... .. | ..... | ..... | 1 | ..... | 1 |
| 33 | Magwe ... .. | ..... | ..... | 156 | ..... | 78 |
| | Total ... .. | ..... | ..... | 1,578 | ..... | 1,420 |
| MEIKTILA DIVISION. | | | | | | |
| 34 | Meiktila ... .. | ..... | ..... | 676 | ..... | 297 |
| 35 | Yamethin ... .. | ..... | ..... | 33 | ..... | 38 |
| 36 | Kyaukse ... .. | ..... | ..... | 69 | ..... | 66 |
| 37 | Myingyan ... .. | ..... | ..... | 64 | ..... | 59 |
| | Total ... .. | ..... | ..... | 847 | ..... | 460 |
| SHAN STATES. | | | | | | |
| 38 | Northern Shan States ... .. | ..... | ..... | 404 | ..... | 374 |
| 39 | Southern Shan States ... .. | ..... | ..... | 339 | ..... | 324 |
| | Total ... .. | ..... | ..... | 743 | ..... | 698 |
| CHIN HILLS. | | | | | | |
| 40 | Chin Hills... .. | ..... | ..... | 1,064 | ..... | 966 |
| | Total ... .. | ..... | ..... | 1,064 | ..... | 966 |
| | GRAND TOTAL FOR 1904-05 ... .. | ..... | ..... | 15,562 | ..... | 9,516 |
| | GRAND TOTAL FOR 1903-04 ... .. | ..... | ..... | 13,930 | ..... | 8,924 |
| | GRAND TOTAL FOR 1902-03 ... .. | ..... | ..... | 11,263 | ..... | 6,622 |

VACCINATION.

Province of Burma for the year 1904-05 (paragraph 14).

| PRIMARY VACCINATION. | | | | RE-VACCINATION. | | | PERCENTAGE OF SUCCESSFUL CASES IN WHICH THE RESULTS WERE KNOWN. | | PERCENTAGE OF UNKNOWN CASES TO TOTAL CASES. | |
|----------------------------------|--------------------------------|----------------------------------|---------------------------------|----------------------------------|------------------------------------|---------------------------------|---|---|---|---------------------------------------|
| Successful. | | | Unknown. | Total. | Successful. | Unknown. | Primary. | Re-vaccination. | Primary. | Re-vaccination. |
| Under one year. | One and under six years. | Total of all ages. | | | | | | | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| ... 2 10 1 | ... 4 189 5 | ... 7 201 182 | ... 138 ... | ... 39 11 | ... 22 ... | ... 11 ... | ... 100 51·54 91·92 | ... 78·57 ... | ... 26·14 ... | ... 28·21 ... |
| 13 | 193 | 390 | 138 | 50 | 22 | 11 | 65·55 | 56·41 | 18·83 | 22·00 |
| ... 30 40 13 49 | ... 151 183 25 41 | ... 255 224 54 94 | ... 4 56 ... 1 | ... 1,870 12 ... | ... 1,157 10 ... | ... 136 | ... 71·63 62·40 98·18 100 | ... 66·72 83·33 ... | ... 1·11 13·49 ... 1·05 | ... 7·27 |
| 132 | 355 | 627 | 61 | 1,882 | 1,167 | 136 | 72·57 | 66·84 | 6·59 | 7·23 |
| 116 15 75 56 86 | 448 83 89 299 367 | 702 124 206 623 772 | 62 1 21 77 4 | 1,634 89 170 422 428 | 448 20 52 172 235 | 151 2 25 111 1 | 92·25 72·51 77·44 93·59 93·01 | 30·21 22·99 33·86 55·31 55·04 | 7·53 ·58 7·32 10·66 ·48 | 9·24 2·25 14·71 26·30 ·23 |
| 348 | 1,286 | 2,427 | 165 | 2,743 | 927 | 290 | 90·80 | 37·79 | 5·81 | 10·57 |
| ... 58 33 21 | ... 107 79 2 ... 3 | ... 217 141 34 ... 7 | ... 144 | ... 195 ... 252 ... | ... 49 ... 168 ... ... | ... ... ... ... ... | ... 95·18 92·16 97·14 ... 43·75 | ... 25·13 ... 62·70 | ... 48·48 ... ... ... | ... ... ... ... ... |
| 112 | 191 | 399 | 144 | 447 | 207 | ... | 92·36 | 46·31 | 25·00 | ... |
| 55 14 7 | 133 20 ... 6 34 | 194 79 26 6 46 | 1 1 6 | 11 13 169 ... 10 | 8 4 44 ... 2 | 13 | 90·23 73·15 66·67 100 75·41 | 72·73 30·77 25·00 ... 20·00 | ... 46 ·92 13·33 | 6·88 |
| 76 | 193 | 351 | 8 | 283 | 58 | 13 | 81·82 | 27·62 | 1·83 | 5·83 |
| 1 23 ... 16 | 1 53 3 186 | 2 76 3 231 | 1 16 ... 15 | ... 13 | ... 4 | ... 9 | 15·38 79·17 8·57 80·49 | ... 100 | ... 7·14 14·29 ... 4·97 | ... 69·23 |
| 40 | 243 | 312 | 32 | 13 | 4 | 9 | 72·39 | 100 | 6·91 | 69·23 |
| 218 2 | 545 83 1 ... | 1,000 131 1 69 | 6 3 | 80 ... 78 | 60 ... 47 | 3 | 90·50 57·71 100 88·46 | 75·00 62·67 | ... 54 1·30 | 3·85 ... |
| 220 | 634 | 1,201 | 9 | 153 | 107 | 3 | 85·12 | 69·03 | ·63 | 1·90 |
| 47 37 20 23 | 153 1 42 9 | 225 38 62 35 | 11 11 | 379 ... 3 5 | 81 ... 1 2 | 173 ... 1 | 78·67 100 93·94 72·92 | 39·32 ... 33·33 50·00 | ... 8·70 ... 18·64 | ... 45·65 ... 20·00 |
| 127 | 205 | 360 | 22 | 387 | 84 | 174 | 82·19 | 39·44 | 4·78 | 44·96 |
| 23 92 | 102 173 | 214 286 | ... 16 | 30 15 | 20 10 | ... ... | 57·22 92·86 | 66·67 66·67 | ... 4·94 | ... ... |
| 120 | 275 | 500 | 16 | 45 | 30 | ... | 73·31 | 66·67 | 2·29 | ... |
| 9 | 128 | 585 | 316 | 98 | 62 | 9 | 90·00 | 69·66 | 32·71 | 9·18 |
| 9 | 128 | 585 | 316 | 98 | 62 | 9 | 90·00 | 69·66 | 32·71 | 9·18 |
| 1,197 | 3,708 | 7,152 | 911 | 6,046 | 2,668 | 645 | 83·11 | 49·40 | 9·57 | 10·67 |
| 1,384 | 3,228 | 6,915 | 625 | 5,006 | 2,426 | 120 | 83·32 | 49·65 | 7·00 | 2·40 |
| 908 | 2,583 | 5,038 | ... | 4,641 | 2,531 | ... | 76·08 | 54·54 | ... | ... |

COMPARATIVE STATEMENT NO. IV.—*Showing the number of persons primarily vaccinated
Burma in each of the under-*

| Establishments. | PERSONS PRIMARILY | | | | | | | | | |
|----------------------|-------------------|--|------------------|--|------------------|--|------------------|--|------------------|--|
| | Total. number. | Number success- fully vac- cinated. | Total number. | Number success- fully vac- cinated. | Total number. | Number success- fully vac- cinated. | Total number. | Number success- fully vac- cinated. | Total number. | Number success- fully vac- cinated. |
| | 1895-96. | | 1896-97. | | 1897-98. | | 1898-99. | | 1899-1900. | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Government | 92,369 | 85,137 | 118,666 | 110,486 | 95,153 | 88,851 | 116,621 | 106,892 | 122,193 | 112,483 |
| Municipal | 81,340 | 74,204 | 83,282 | 78,036 | 82,934 | 78,827 | 81,987 | 78,636 | 72,287 | 69,705 |
| Local Funds | 155,537 | 142,638 | 168,718 | 172,580 | 222,231 | 210,880 | 233,331 | 223,367 | 260,518 | 243,803 |
| Native States | ... | ... | ... | ... | ... | ... | 2,108 | 1,941 | 1,764 | 1,631 |
| Dispensary | 6,056 | 5,546 | 5,466 | 4,964 | 5,151 | 4,891 | 8,209 | 7,278 | 6,033 | 5,421 |
| Army | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Europeans | 68 | 45 | 31 | 26 | 80 | 50 | 53 | 49 | 28 | 19 |
| Natives | 604 | 329 | 655 | 390 | 379 | 249 | 546 | 363 | 782 | 344 |
| Total | 335,974 | 307,899 | 396,313 | 366,482 | 405,928 | 338,743 | 447,858 | 423,519 | 463,605 | 438,406 |

STATEMENT NO V.—*Showing particulars of*

| Number. | Districts. | TOTAL NUMBER OF PERSONS VACCINATED. | | TOTAL NUMBER INSPECTED. | | | |
|--------------------------------|-------------------------------------|--|--------|---|-----------------|--|-----------------|
| | | | | By Deputy Sanitary Com- missioner or Civil Surgeons. | | By Native Superintendents or other Inspecting Officers. | |
| | | | | Primary. | Re-vaccination. | Primary. | Re-vaccination. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Akyab | 9,778 | 375 | 1,269 | 347 | 3,521 | 251 |
| 2 | Hill Tracts, Northern Arakan | 533 | 9 | ..... | ..... | 12 | ..... |
| 3 | Kyaukpau | 6,266 | 164 | 444 | 38 | 187 | 13 |
| 4 | Sandoway | 2,504 | 11 | 380 | ..... | 193 | 11 |
| 5 | Rangoon | 10,764 | 10,605 | 5,620 | 4,966 | 62 | 59 |
| 6 | Hanthawaddy | 5,082 | 2,436 | 317 | 1,338 | 3,021 | 593 |
| 7 | Pegu | 9,956 | 418 | 1,850 | 165 | 646 | 110 |
| 8 | Tharrawaddy | 14,917 | 30 | 898 | ..... | 7,470 | 29 |
| 9 | Prome | 17,842 | 1,277 | 1,920 | 114 | 1,337 | 535 |
| 10 | Ma-ubin | 3,783 | 1,688 | 1,613 | 1,071 | 1,304 | 1,122 |
| 11 | Pyapön | 3,884 | 243 | 649 | 142 | 233 | ..... |
| 12 | Bassein | 17,741 | 1,030 | 5,202 | 499 | 9,954 | 813 |
| 13 | Heuzada | 39,562 | 775 | 2,679 | 284 | 2,104 | 237 |
| 14 | Myaungmya | 8,499 | 1,167 | 1,250 | 353 | 261 | 103 |
| 15 | Amherst | 16,253 | 639 | 1,266 | 251 | 7,738 | 523 |
| 16 | Tavoy | 11,296 | 2,744 | 6,315 | 178 | 603 | 1,679 |
| 17 | Mergui | 6,817 | 10 | 4,402 | ..... | 112 | ..... |
| 18 | Thatön | 3,966 | ..... | 2,477 | ..... | 3,235 | ..... |
| 19 | Toungoo | 9,929 | 669 | 514 | 226 | 3,446 | 299 |
| 20 | Salween | 1,074 | ..... | 47 | ..... | ..... | ..... |
| 21 | Mandalay | 13,881 | 858 | 3,214 | 171 | 7,222 | 23 |
| 22 | Bhamo | 3,251 | 534 | 1,426 | 22 | 241 | 13 |
| 23 | Katha | 2,618 | 189 | 659 | 188 | 45 | 135 |
| 24 | Ruby Mines | 2,336 | ..... | 615 | ..... | ..... | ..... |
| 25 | Myitkyina | 1,053 | 27 | 107 | 11 | 43 | 10 |
| 26 | Shwebo | 16,591 | 239 | 2,955 | 64 | 4,231 | ..... |
| 27 | Sagaing | 12,116 | 611 | 1,627 | 4 | 56 | ..... |
| 28 | Lower Chindwin | 14,072 | 103 | 5,569 | 40 | 35 | 63 |
| 29 | Upper Chindwin | 11,856 | ..... | 1,319 | ..... | 291 | ..... |
| 30 | Thayetmyo | 17,917 | 2,107 | 1,421 | 715 | 2,821 | 135 |
| 31 | Paköku | 8,415 | 353 | 4,457 | 242 | 230 | ..... |
| 32 | Minbu | 7,289 | 317 | 1,194 | 182 | 848 | 14 |
| 33 | Magwe | 10,972 | 225 | 2,873 | 5 | 673 | 126 |
| 34 | Meiktila | 10,937 | 400 | 3,078 | 215 | 260 | 11 |
| 35 | Yamethin | 10,804 | 889 | 2,482 | 375 | 1,550 | ..... |
| 36 | Kyaukse | 5,831 | 171 | 1,863 | ..... | 139 | 2 |
| 37 | Myingyan | 12,780 | 802 | 3,043 | 455 | 4,832 | 98 |
| 38 | Lashio | 7,337 | 30 | 1,086 | ..... | 3,644 | 30 |
| 39 | Taunggyi | 8,243 | 15 | 120 | ..... | 429 | 15 |
| 40 | Chin Hills | 2,208 | 117 | 19 | 35 | 690 | 73 |
| GRAND TOTAL FOR 1904-05 | | 380,686 | 32,317 | 78,238 | 12,756 | 73,674 | 7,175 |
| GRAND TOTAL FOR 1903-04 | | 384,722 | 27,842 | 76,738 | 11,257 | 67,126 | 6,736 |
| GRAND TOTAL FOR 1902-03 | | 354,629 | 27,144 | 73,218 | 12,651 | 46,882 | 7,321 |

and the number of those persons who were successfully vaccinated in the Province of mentioned official years (paragraph 15).

VACCINATED.

| Total number. | Number successfully vaccinated. | Total number. | Number successfully vaccinated. | Total number. | Number successfully vaccinated. | Total number. | Number successfully vaccinated. | Total number. | Number successfully vaccinated. |
|---------------|---------------------------------|---------------|---------------------------------|---------------|---------------------------------|---------------|---------------------------------|---------------|---------------------------------|
| 1900-01. | | 1901-02. | | 1902-03. | | 1903-04. | | 1904-05. | |
| 7 | | 8 | | 9 | | 10 | | 11 | |
| 1,06,629 | 95,392 | 91,530 | 83,082 | 120,381 | 101,166 | 135,391 | 109,016 | 138,435 | 109,201 |
| 62,338 | 58,008 | 52,227 | 46,695 | 55,352 | 47,049 | 53,775 | 44,879 | 59,410 | 46,168 |
| 215,111 | 198,789 | 131,107 | 166,283 | 165,218 | 149,585 | 179,917 | 160,516 | 166,339 | 141,626 |
| 1,574 | 1,420 | 1,822 | 1,553 | 7,053 | 5,451 | 6,712 | 5,624 | 6,986 | 4,989 |
| 6,653 | 4,229 | 3,971 | 3,033 | 6,622 | 5,038 | 8,921 | 6,915 | 9,516 | 7,152 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 23 | 10 | 20 | 9 | 25 | 11 | ... | ... | 25 | 14 |
| 391 | 207 | 111 | 67 | 359 | 283 | 380 | 222 | 379 | 215 |
| 392,719 | 358,055 | 333,791 | 300,722 | 355,018 | 308,583 | 385,102 | 327,172 | 381,090 | 309,365 |

Vaccination verified by Inspecting Officers (paragraph 16).

| PERCENTAGE OF INSPECTIONS TO TOTAL NUMBER VACCINATED. | | | | PERCENTAGE OF CASES FOUND SUCCESSFUL OF TOTAL NUMBER INSPECTED. | | | | PERCENTAGE OF SUCCESS REPORTED BY VACCINATORS. | |
|---|-----------------|---|-----------------|---|-----------------|---|-----------------|--|-----------------|
| By Deputy Sanitary Commissioner or Civil Surgeons. | | By Native Superintendents or other Inspecting Officers. | | By Deputy Sanitary Commissioner or Civil Surgeons. | | By Native Superintendents or other Inspecting Officers. | | | |
| Primary. | Re-vaccination. | Primary. | Re-vaccination. | Primary. | Re-vaccination. | Primary. | Re-vaccination. | Primary. | Re-vaccination. |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 12.98 | 92.53 | 33.02 | 66.93 | 85.19 | 45.53 | 75.26 | 53.78 | 68.72 | 48.8 |
| ... | ... | 2.06 | ... | ... | ... | 83.33 | ... | 92.56 | 77.78 |
| 7.09 | 24.68 | 2.93 | 8.41 | 58.33 | 89.47 | 80.75 | 100 | 83.85 | 78.93 |
| 15.18 | ... | 7.91 | 100 | 88.95 | ... | 91.92 | ... | 87.12 | ... |
| 52.21 | 46.83 | 58 | 53 | 74.07 | 55.76 | 62.90 | 52.54 | 73.67 | 55.72 |
| 6.83 | 56.23 | 59.45 | 23.85 | 73.20 | 66.60 | 50.84 | 46.21 | 61.26 | 16.72 |
| 18.58 | 39.47 | 5.48 | 26.32 | 86.81 | 79.39 | 82.97 | 69.09 | 86.37 | 69.63 |
| 6.02 | ... | 50.08 | 96.67 | 91.93 | ... | 85.22 | 13.79 | 85.63 | 14.29 |
| 10.76 | 8.93 | 7.49 | 41.90 | 88.80 | 34.21 | 88.56 | 61.31 | 93.55 | 44.59 |
| 42.77 | 63.45 | 31.47 | 66.47 | 84.86 | 25.40 | 93.17 | 32.71 | 86.45 | ... |
| 16.71 | 53.44 | 7.29 | ... | 68.10 | 15.49 | 74.56 | ... | 83.22 | 20.18 |
| 29.32 | 48.45 | 56.11 | 78.93 | 87.93 | 29.46 | 88.52 | 28.91 | 89.08 | 29.61 |
| 6.77 | 36.65 | 5.32 | 30.53 | 91.59 | 60.56 | 92.22 | 45.99 | 93.23 | 48.64 |
| 14.81 | 30.25 | 3.07 | 8.83 | 89.99 | 64.59 | 86.97 | 37.86 | 92.67 | 70.42 |
| 7.79 | 30.28 | 47.61 | 81.85 | 87.99 | 35.25 | 91.12 | 50.86 | 91.17 | 83.62 |
| 55.90 | 6.49 | 5.34 | 61.19 | 94.74 | 41.01 | 98.34 | 29.30 | 96.51 | 21.89 |
| 64.57 | ... | 1.61 | ... | 81.99 | ... | 87.5 | ... | 83.69 | ... |
| 62.16 | ... | 81.57 | ... | 67.70 | ... | 65.32 | ... | 69.24 | ... |
| 5.18 | 33.78 | 34.71 | 44.69 | 89.88 | 62.30 | 86.65 | 55.85 | 89.38 | 47.96 |
| 4.33 | ... | ... | ... | 34.04 | ... | ... | ... | 53.21 | ... |
| 23.15 | 19.93 | 52.03 | 2.63 | 90.67 | 43.27 | 72.71 | 30.43 | 83.44 | 42.96 |
| 43.86 | 4.12 | 7.41 | 2.43 | 77.00 | 86.36 | 87.55 | 30.77 | 90.09 | 69.23 |
| 25.17 | 99.47 | 1.72 | 97.83 | 74.51 | 23.40 | 57.78 | 23.78 | 86.23 | ... |
| 25.78 | ... | ... | ... | 88.13 | ... | ... | ... | 86.48 | ... |
| 10.16 | 40.74 | 4.03 | 37.04 | 85.98 | ... | 74.42 | 20.00 | 81.84 | 5.83 |
| 17.81 | 26.78 | 25.30 | ... | 85.69 | 28.13 | 89.96 | ... | 92.50 | 65.95 |
| 13.43 | 65 | 46 | ... | 79.72 | 100 | 64.29 | ... | 75.23 | 58.98 |
| 39.58 | 33.83 | 25 | 61.17 | 77.02 | 40 | 8.57 | 47.62 | 79.33 | 44.66 |
| 11.62 | ... | 2.56 | ... | 66.64 | ... | 79.38 | ... | 87.61 | ... |
| 7.92 | 33.93 | 15.72 | 6.41 | 60.03 | 79.72 | 88.43 | 85.19 | 89.82 | 65.99 |
| 52.96 | 68.56 | 2.73 | ... | 81.87 | 7.02 | 56.96 | ... | 74.63 | 5.54 |
| 16.33 | 57.41 | 11.63 | 4.42 | 78.89 | 58.24 | 78.30 | 42.86 | 60.42 | 54.10 |
| 26.18 | 2.22 | 6.13 | 56.00 | 80.53 | 60.00 | 92.27 | 75.40 | 91.36 | 93.59 |
| 28.01 | 53.75 | 2.37 | 2.75 | 94.02 | 49.93 | 80.00 | 81.82 | 80.58 | 80.00 |
| 22.51 | 42.13 | 14.35 | ... | 88.90 | 22.13 | 100 | ... | 97.61 | 74.62 |
| 31.95 | ... | 2.38 | 1.17 | 79.60 | ... | 95.68 | 100 | 86.61 | 93.37 |
| 23.85 | 56.73 | 37.81 | 12.22 | 85.79 | 32.97 | 77.81 | 34.69 | 60.93 | 25.91 |
| 14.70 | ... | 49.33 | 100 | 63.51 | ... | 50.63 | 66.67 | 71.06 | ... |
| 1.45 | ... | 5.20 | 100 | 95.00 | ... | 78.55 | 66.67 | 75.90 | ... |
| .86 | 29.91 | 31.25 | 62.39 | 73.68 | 55.71 | 89.13 | 72.60 | 75.62 | ... |
| 20.55 | 39.47 | 19.35 | 22.20 | 83.10 | 50.76 | 81.13 | 41.35 | 84.71 | 47.60 |
| 19.95 | 40.43 | 17.45 | 24.19 | 85.55 | 57.87 | 84.59 | 43.60 | 87.20 | 54.97 |
| 20.65 | 46.61 | 13.22 | 23.97 | 87.31 | 58.53 | 85.76 | 43.44 | 87.14 | 46.83 |

APPENDIX A.

Showing the ratio per 10,000 successfully vaccinated and the mortality from small-pox by quinquennial periods for Lower Burma only (paragraph 6).

| Official year. | | | | Ratio per 10,000 successfully vaccinated. | Quinquennial mean. | Calendar year. | | | | Ratio for 10,000 of mortality from small-pox. | Quinquennial mean. |
|----------------|-----|-----|-----|--|-----------------------|----------------|-----|-----|-----|--|-----------------------|
| 1 | | | | 2 | 3 | 4 | | | | 5 | 6 |
| 1889-90 | ... | ... | ... | 266.70 | 253.45 | 1889 | ... | ... | ... | 7.70 | 5.91 |
| 1890-01 | ... | ... | ... | 241.73 | | 1890 | ... | ... | ... | 10.11 | |
| 1891-92 | ... | ... | ... | 214.17 | | 1891 | ... | ... | ... | 2.89 | |
| 1892-93 | ... | ... | ... | 257.91 | | 1892 | ... | ... | ... | 3.24 | |
| 1893-94 | ... | ... | ... | 303.46 | | 1893 | ... | ... | ... | 6.83 | |
| 1894-95 | ... | ... | ... | 353.83 | 519.26 | 1894 | ... | ... | ... | 3.85 | 5.19 |
| 1895-96 | ... | ... | ... | 448.91 | | 1895 | ... | ... | ... | 3.41 | |
| 1896-97 | ... | ... | ... | 554.43 | | 1896 | ... | ... | ... | 3.70 | |
| 1897-98 | ... | ... | ... | 586.66 | | 1897 | ... | ... | ... | 4.32 | |
| 1898-99 | ... | ... | ... | 652.47 | | 1898 | ... | ... | ... | 10.70 | |
| 1899-00 | ... | ... | ... | 678.31 | 436.91 | 1899 | ... | ... | ... | 13.21 | 5.57 |
| 1900-01 | ... | ... | ... | 530.41 | | 1900 | ... | ... | ... | 6.76 | |
| 1901-02 | ... | ... | ... | 352.69 | | 1901 | ... | ... | ... | 4.45 | |
| 1902-03 | ... | ... | ... | 328.04 | | 1902 | ... | ... | ... | 2.82 | |
| 1903-04 | ... | ... | ... | 353.66 | | 1903 | ... | ... | ... | 2.30 | |
| 1904-05 | ... | ... | ... | 324.89 | ... | 1904 | ... | ... | ... | 2.33 | ... |

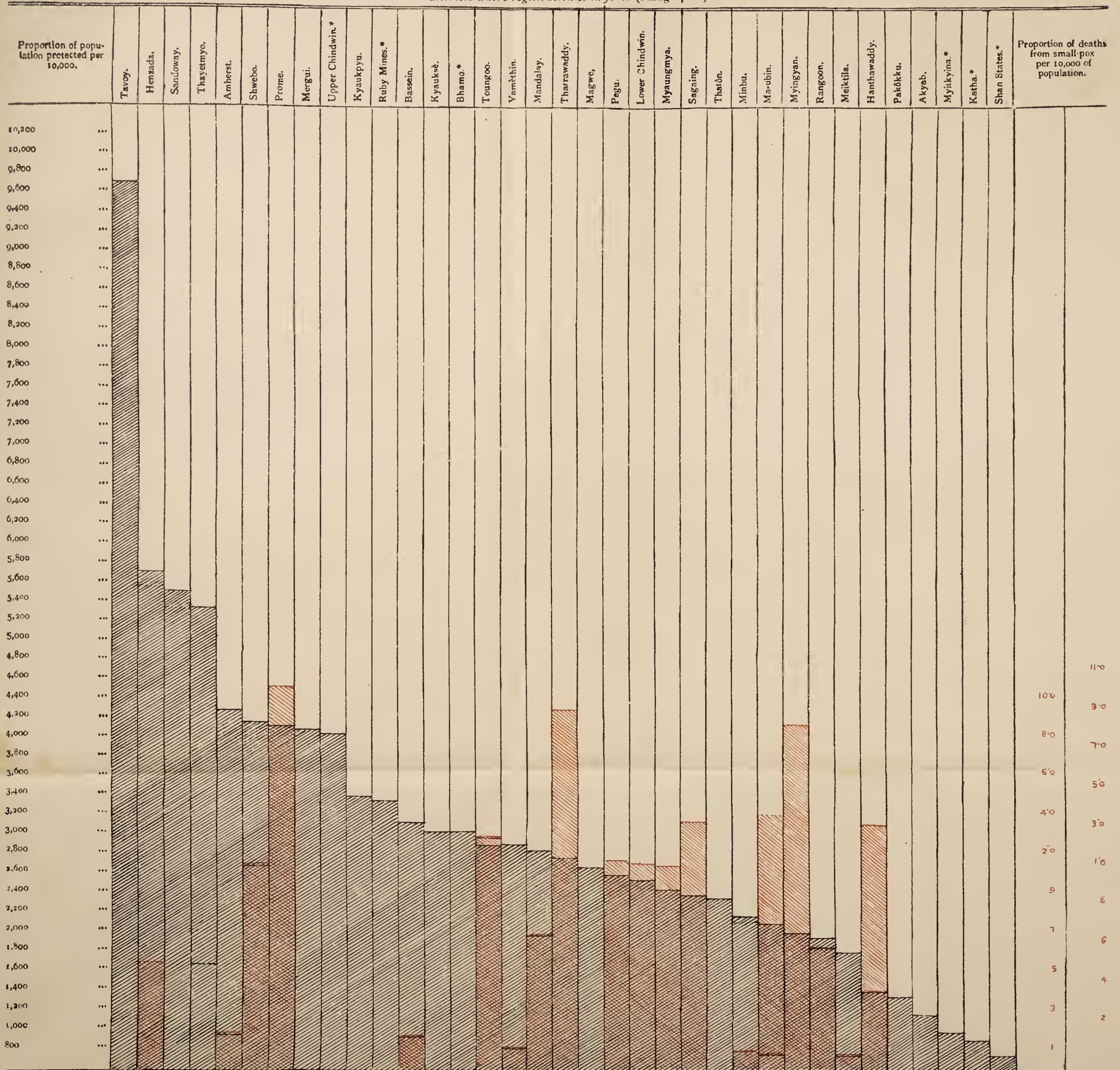
APPENDIX B.

Statistics relating to the number of children under one year of age in towns available for vaccination and the number of successful operations performed on them (paragraph 13).

| Towns. | | | | Number of births during the year 1901- 05. | Number of deaths among children under one year during the year 1904-05. | Number available for vaccina- tion after deducting the num- bers who have died as shewn in column 3. | Number of successful vaccinations on children under one year during the year ending 31st March 1905. | Date of extension of Vaccination Act into town. |
|----------------|-----|-----|-----|--|--|---|--|--|
| 1 | | | | 2 | 3 | 4 | 5 | 6 |
| Akyab | ... | ... | ... | 617 | 185 | 462 | 441 | August 1883. |
| Kyaukpau | ... | ... | ... | 78 | 15 | 63 | 22 | April 1891. |
| Sandoway | ... | ... | ... | 103 | 24 | 79 | 42 | September 1890. |
| Rangoon | ... | ... | ... | 4,386 | 1,510 | 2,876 | 2,450 | April 1884. |
| Pegu | ... | ... | ... | 436 | 108 | 323 | 154 | March 1893. |
| Prome | ... | ... | ... | 965 | 169 | 796 | 753 | June 1890. |
| Faungdè | ... | ... | ... | 430 | 96 | 334 | 326 | August 1890. |
| Gyobingauk | ... | ... | ... | 243 | 69 | 184 | 93 | February 1897. |
| Letpadan | ... | ... | ... | 214 | 37 | 177 | 64 | January 1897. |
| Thônzè | ... | ... | ... | 210 | 61 | 149 | 145 | October 1897. |
| Ma-ubin | ... | ... | ... | 174 | 41 | 133 | 62 | October 1891. |
| Yandoon | ... | ... | ... | 502 | 105 | 397 | 184 | January 1892. |
| Pyapôn | ... | ... | ... | 199 | 30 | 169 | 245 | November 1904. |
| Bassein | ... | ... | ... | 1,030 | 265 | 765 | 753 | September 1888. |
| Ngathaingyaung | ... | ... | ... | 233 | 46 | 187 | 137 | February 1890. |
| Myaungmya | ... | ... | ... | 99 | 34 | 65 | 111 | June 1894. |
| Henzada | ... | ... | ... | 1,023 | 289 | 734 | 514 | January 1889. |
| Zalun | ... | ... | ... | 246 | 55 | 191 | 202 | August 1894. |
| Myanaung | ... | ... | ... | 270 | 61 | 209 | 221 | July 1889. |
| Moulmein | ... | ... | ... | 1,337 | 195 | 1,142 | 1,121 | August 1885. |
| Thatôn | ... | ... | ... | 425 | 95 | 330 | 210 | October 1891. |
| Kyaukto | ... | ... | ... | 200 | 23 | 172 | 33 | March 1897. |
| Tavoy | ... | ... | ... | 812 | 104 | 708 | 682 | December 1889. |
| Mergui | ... | ... | ... | 429 | 84 | 345 | 272 | October 1891. |
| Toungoo | ... | ... | ... | 550 | 144 | 406 | 267 | May 1889. |
| Shwegyin | ... | ... | ... | 204 | 18 | 186 | 153 | January 1890. |
| Mandalay | ... | ... | ... | 5,610 | 1,750 | 3,860 | 4,560 | August 1891. |
| Sagaing | ... | ... | ... | 339 | 86 | 303 | 185 | April 1894. |
| Monywa | ... | ... | ... | 344 | 82 | 262 | 237 | March 1893. |
| Thayetmyo | ... | ... | ... | 481 | 172 | 309 | 488 | May 1889. |
| Yamethin | ... | ... | ... | 227 | 54 | 173 | 188 | February 1892. |
| Pyinmana | ... | ... | ... | 574 | 46 | 523 | 414 | November 1891. |
| Myingyan | ... | ... | ... | 603 | 190 | 413 | 538 | September 1891. |
| Shwebo | ... | ... | ... | 274 | 93 | 176 | 209 | June 1894. |
| Pakokku | ... | ... | ... | 819 | 217 | 602 | 436 | April 1892. |
| Kyaukse | ... | ... | ... | 275 | 76 | 199 | 242 | May 1894. |
| Minbu | ... | ... | ... | 191 | 31 | 160 | 116 | March 1896. |
| Salin | ... | ... | ... | 223 | 57 | 171 | 104 | March 1896. |
| Taungdwingyi | ... | ... | ... | 255 | 93 | 162 | 203 | February 1893. |
| Total | | | | 25,715 | 6,810 | 18,905 | 17,627 | |

APPENDIX C.

Diagram showing the proportion of population protected during the seven official years from 1898-99 to 1904-05 and the death-rate from small-pox during the calendar year 1904 in districts where registration is in force (Paragraph 6).



G. B. C. P. O — NO 311, 5-25-10-05 — 385 LITHO.

Indicates rates of deaths from small-pox per 10,000 of population.

Indicates proportion of population protected per 10,000.

Registration of vital statistics is not carried out in these districts

Statistics of Pyapôn have been included in Ma-ubin



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